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# PREVENTION OF SIGNIFICANT DETERIORATION OF AIR QUALITY—THE REGULATIONS AFTER *ALABAMA POWER*

Kent R. Floy\*

## INTRODUCTION

On August 7, 1980, the Environmental Protection Agency (EPA) issued revised regulations concerning the prevention of significant deterioration of air quality.<sup>1</sup> The revised regulations are a result of *Alabama Power v. Costle*<sup>2</sup> where the District of Columbia Court of Appeals invalidated the prior regulations. The new regulations are significant in that industry received concessions from EPA in excess of what *Alabama Power* demanded and environmentalists were disheartened by the result. More importantly, the revised regulations are of significance in that they fully define and implement the concept of prevention of significant deterioration (PSD) of air quality contained in the Clean Air Act.<sup>3</sup> The Clean Air Act, including the PSD portions of it, will soon be before Congress for revision.<sup>4</sup> It is essential, therefore, that the current PSD program be understood<sup>5</sup> in order that appropriate improvements can be contemplated. This article will proceed to examine the new regulations

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\* University of Iowa College of Law, J.D. 1981. The author wishes to express his thanks to Christopher Elliott for his review of preliminary drafts of the article.

<sup>1</sup> 45 Fed. Reg. 52,676 (1980).

<sup>2</sup> *Alabama Power v. Costle*, 13 E.R.C. (BNA) 1993 (D.C. Cir. 1979).

<sup>3</sup> Clean Air Act §§ 160-169A, 42 U.S.C. §§ 7470-7491 (Supp. I 1977).

<sup>4</sup> See note 342 *infra* and accompanying text.

<sup>5</sup> Understanding the concept of PSD contained in the Clean Air Act and the revised regulations is not an easy task. See note 323 *infra* and accompanying text. It is beyond the scope of this article to suggest legislative changes in the PSD program. Rather, this article attempts to evaluate the existing PSD program.

by reviewing their substantive and procedural content and evaluating their impact on air quality and industrial sources of pollution.

The provisions of the Clean Air Act<sup>6</sup> that deal with prevention of significant deterioration will first be outlined. Secondly, the substantive and procedural content of the revised regulations will be considered in light of the *Alabama Power* decision. Finally, the overall effect of the revised regulations will be analyzed and the future of prevention of significant deterioration will be explored briefly.

## I. THE CLEAN AIR ACT AND PREVENTION OF SIGNIFICANT DETERIORATION

The Clean Air Act Amendments of 1977<sup>7</sup> required, for the first time, that state implementation plans<sup>8</sup> make provisions for the prevention of significant deterioration of air quality. Encompassed in the idea of prevention of significant deterioration (PSD) is the realization that the need for industrial expansion<sup>9</sup> must be balanced with the need to restrict industrial emissions in areas where the existing air quality exceeds the national ambient air quality standards.<sup>10</sup> In short, the PSD statutory scheme is aimed at keeping clean air clean and preventing relatively clean air from deteriorating to minimally acceptable standards.

To implement the PSD statutory provisions<sup>11</sup> in a particular region,<sup>12</sup> one of two things must occur. The statute will apply if (1) the necessary information concerning sulfur dioxides or particulate matter<sup>13</sup> is unavailable to determine if national primary<sup>14</sup> or secon-

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<sup>6</sup> 42 U.S.C. §§ 7401-7642 (Supp. I 1977).

<sup>7</sup> Pub. L. No. 95-95, § 127(a), 91 Stat. 731 (1977) (codified at 42 U.S.C. §§ 7470-7479 (Supp. I 1977)).

<sup>8</sup> State implementation plans (SIP's) are the mechanisms used by the states to enforce air quality standards under the Clean Air Act. Not only are SIP's used to enforce PSD but they are also used to enforce national primary and secondary air quality standards. See notes 26-29 *infra* and accompanying text.

<sup>9</sup> Clean Air Act, § 160(3), 42 U.S.C. § 7470(3) (Supp. I 1977).

<sup>10</sup> *Id.* §§ 107(d)(1)(D), 107(d)(1)(E), 42 U.S.C. §§ 7407(d)(1)(D), 7407(d)(1)(E).

<sup>11</sup> *Id.* §§ 160-169, 42 U.S.C. §§ 7470-7479.

<sup>12</sup> *Id.* § 107(b), 42 U.S.C. § 7407(b). For a listing of regions see 40 C.F.R. §§ 81.1-.356 (1979).

<sup>13</sup> The PSD statutory provisions are primarily concerned with two types of pollutants: sulfur dioxide and particulate matter. Clean Air Act, § 163(a), 42 U.S.C. § 7473(a) (Supp. I 1977). By August 7, 1979, hydrocarbons, carbon monoxide, photochemical oxidants, and nitrogen oxides were also to have been covered by PSD requirements but EPA has not yet promulgated the necessary regulations. *Id.* § 166, 42 U.S.C. § 7476. There are indications that PSD provisions will soon be established for these pollutants. 10 ENVIR. REP. (BNA)

dary<sup>15</sup> ambient air qualities are met<sup>16</sup> or (2) the ambient air quality levels within a region are superior to national primary or secondary ambient air quality levels.<sup>17</sup> If PSD provisions are applicable, then the area is categorized as a "clean air area." If PSD provisions are not applicable, the area is classified as a nonattainment area and is then subject to an entirely different statutory scheme for air quality control.<sup>18</sup>

The national primary and secondary ambient air quality standards, which are used in classifying a nonattainment or clean air area, are established by EPA<sup>19</sup> under congressional guidelines. Primary ambient air quality standards are to be set so that the public health is protected by an adequate margin of safety.<sup>20</sup> Secondary ambient air quality standards are designed so that the public health is protected from any known or anticipated adverse effects associated with pollution in the ambient air.<sup>21</sup> Primary and secondary ambient standards are promulgated for all pollutants emitted from any mobile or stationary source<sup>22</sup> that may reasonably be anticipated to endanger public health or welfare.<sup>23</sup>

Clean air areas are designated as Class I, Class II, or Class III.<sup>24</sup>

(Curr. Dev.) 2353 (April 25, 1980).

<sup>14</sup> See notes 19-23 *infra* and accompanying text.

<sup>15</sup> See notes 19-23 *infra* and accompanying text.

<sup>16</sup> Clean Air Act, § 107(d)(1)(D), 42 U.S.C. § 7407(d)(1)(D) (Supp. I 1977).

<sup>17</sup> *Id.* § 107(d)(1)(E), 42 U.S.C. § 7407(d)(1)(E). For a concise summary of the entire Clean Air Act, see Project, *State and Local Industrial Location Incentives—A Well-Stocked Candy Store*, 5 J. CORP. L. 527, 613 (1980).

<sup>18</sup> Clean Air Act, §§ 171-178, 42 U.S.C. §§ 7501-7508 (Supp. I 1977). Determination of whether an area is a clean air or a nonattainment area is based on each pollutant. Therefore, an area could be nonattainment for purposes of sulfur dioxide but a clean air area for purposes of particulate matter.

<sup>19</sup> Clean Air Act, § 109(a), 42 U.S.C. § 7409(a) (Supp. I 1977).

<sup>20</sup> *Id.* § 109(b)(1), 42 U.S.C. § 7409(b)(1).

<sup>21</sup> *Id.* § 109(b)(2), 42 U.S.C. § 7409(b)(2).

<sup>22</sup> *Id.* § 108(a)(1)(B), 42 U.S.C. § 7408(a)(1)(B). Primary and secondary ambient air quality standards were promulgated for those pollutants which were deemed to be a menace to the public health and safety under the Air Quality Act of 1967. Pub. L. No. 90-148, § 107(b), 81 Stat. 485 (1967). Five such pollutants were named as a menace to the public health and safety prior to the 1970 Act: sulfur oxide; particulate matter; carbon monoxide; hydrocarbons; and photochemical oxidants.

<sup>23</sup> Clean Air Act, § 108(a)(1)(A), 42 U.S.C. § 7408(a)(1)(A) (Supp. I 1977).

<sup>24</sup> Initially all areas are classified as Class I or Class II with Class I areas including international parks, national wilderness areas which exceed five thousand acres in size, national memorial parks which exceed five thousand acres in size, and national parks which exceed six thousand acres in size. Class II areas are all other areas to which PSD requirements apply. *Id.* § 162, 42 U.S.C. § 7472. States, however, are able to redesignate, within limits, the classification of an area. This is the mechanism for establishing Class III areas. *Id.* § 164, 42

The maximum allowable increase in the concentration of sulfur dioxide and particulate matter is restricted for each class. Class I areas allow the smallest increase and Class III areas allow the largest increase.<sup>25</sup> By classifying areas as Class I, II, or III, there is some flexibility in administration of the PSD scheme.

The PSD statutory scheme is enforced by the states through state implementation plans (SIP's).<sup>26</sup> Prior to the 1977 Amendments, SIP's were used exclusively in enforcing national primary and secondary ambient air quality standards.<sup>27</sup> The 1977 Amendments mandate that SIP's be amended so that PSD requirements are also established and enforced. The EPA Administrator must approve a SIP before it takes effect. If a SIP, or any portion of a SIP, is rejected by EPA<sup>28</sup> or if a state fails to submit a SIP, EPA is given power to implement a SIP, or a portion of a SIP, for the state.<sup>29</sup>

No major emitting facility<sup>30</sup> may be erected in an area where PSD applies unless a permit has been issued for the facility in accordance with section 165 of the Clean Air Act<sup>31</sup> and the applicable state implementation plan. For a permit to issue, the owner or operator of the facility must demonstrate that emissions from the operation or construction of a facility will not violate the maximum allowable increase for a pollutant in a clean air area or violate a national ambient air quality standard in any air quality control region.<sup>32</sup> It must also be shown that the proposed facility is subject to the best available control technology for each pollutant.<sup>33</sup> Various other requirements must be met as well.<sup>34</sup>

EPA promulgated regulations<sup>35</sup> for implementation of the PSD

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U.S.C. § 7474.

<sup>25</sup> *Id.* § 163, 42 U.S.C. § 7473.

<sup>26</sup> *Id.* § 161, 42 U.S.C. § 7471.

<sup>27</sup> *Id.* § 110, 42 U.S.C. § 7410.

<sup>28</sup> For the grounds on which EPA may disapprove a SIP, see *id.* § 110(a), 42 U.S.C. § 7410(a).

<sup>29</sup> *Id.* § 110(c), 42 U.S.C. § 7410(c). For the SIP which is applicable if a state fails to gain approval of their own SIP, see 40 C.F.R. § 52.21 (1979). For the SIP applicable to each state, see 40 C.F.R. §§ 52.50-.2780 (1979).

<sup>30</sup> See text at notes 83-85 *infra*.

<sup>31</sup> Clean Air Act, § 165(a)(1), 42 U.S.C. § 7475(a)(1) (Supp. I 1977).

<sup>32</sup> *Id.* § 165(a)(3), 42 U.S.C. § 7475(a)(3).

<sup>33</sup> *Id.* §§ 165(a)(4), 169(3), 42 U.S.C. §§ 7475(a)(4), 7479(3).

<sup>34</sup> *Id.* §§ 165(a)(2), (5), (6), (7), (8), 42 U.S.C. §§ 7475(a)(2), (5), (6), (7), (8).

<sup>35</sup> 40 C.F.R. §§ 51.24, 52.21 (1979). Section 51.24 provides the minimal guidelines for states in establishing SIP's while section 52.21 applies to states where the SIP has been disapproved, either in whole or in part.

provisions of the Clean Air Act.<sup>36</sup> They became effective on June 19, 1978,<sup>37</sup> and within sixty days of promulgation<sup>38</sup> the PSD regulations were challenged by numerous parties.<sup>39</sup> All actions were consolidated and the Court of Appeals for the District of Columbia issued a series of three opinions. The first opinion, *Citizens to Save Spencer County v. EPA*,<sup>40</sup> dealt with significant preliminary issues.<sup>41</sup> The remaining issues were then dealt with in the second and third opinions, both of which are entitled *Alabama Power Company v. EPA*.<sup>42</sup> The second decision, handed down on June 18, 1979, was a *per curiam* opinion which summarized the rulings on

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<sup>36</sup> Clean Air Act, §§ 160-169, 42 U.S.C. §§ 7470-7479 (Supp. I 1977).

<sup>37</sup> 43 Fed. Reg. 26,380 (1978).

<sup>38</sup> Clean Air Act, § 307(b)(1), 42 U.S.C. § 7607(b)(1) (Supp. I 1977).

<sup>39</sup> The following parties challenged the regulations: Alabama Power Company, American Petroleum Institute, Environmental Defense Fund, Hampton Roads Energy Company, The Montana Power Company, the District of Columbia (a municipal corporation), National Coal Association, Mining and Reclamation Council of America, Pacific Power and Light Company, Portland General Electric Company, Puget Sound Power and Light Company, Washington Water Power Company, American Iron and Steel Institute, American Paper Institute, the National Forest Products Association, Ashland-Warren, Inc., Manufacturing Chemists Association, Chemical Products Corporation, Dow Chemical Company, FMC Corporation, Monsanto Company, PPG Industries, Rohm and Haas Company, Stauffer Chemical Corporation, Union Carbide Corporation, Allied Chemical Corporation, Asarco Incorporated, American Mining Congress, United States Steel Corporation, Buttes Resources Company, Cyrus Mines Corporation, Energy Fuels Corporation, Freeport Exploration Company, ITT Resources, Inc., Thermal Energy Inc., Wyoming Mineral Corporation, Westmoreland Coal Company, Westmoreland Resources, Inc., State of Texas, Mitchell Energy Company, Cheyenne Refining Co., Gary Western Co., LA Jet Inc., Sierra Club, Reynolds Metals Company, Colorado Interstate Gas Company, Tennessee Gas Pipeline Company, Natural Gas Pipeline Company of America, Terminals Corporation, General American Transportation Corporation, GATX Corporation, Occidental Oil Shale, Inc., Ashland, Colorado, Inc., Kroppers Company, and USM Corporation.

<sup>40</sup> 600 F.2d 844 (D.C. Cir. 1979).

<sup>41</sup> This opinion dealt principally with five issues. First, the court held that provisions of the Clean Air Act establishing guidelines for implementation of federal preconstruction review requirements for major pollution-emitting facilities were inconsistent and required a harmonizing interpretation. Second, authority was vested in EPA to engage in rule-making to harmonize those inconsistent provisions. Third, notice and comment procedures were compiled with respect to rules which were legislative as opposed to interpretive in nature. Fourth, the court held that an interpretive rule by which EPA incorporated into its regulations the immediately effective PSD requirements identified in the Clean Air Act was entitled to great deference and had a reasonable basis in law. Finally, the court evaluated legislative rules by which EPA provided guidance to states on how to incorporate into state implementation plans the comprehensive set of new PSD regulations. These rules which sought to bring current regulations into conformity with the Clean Air Act and thus provide for direct administration and enforcement of preconstruction requirements prior to their eventual adoption into state plans were found to be neither arbitrary nor capricious. 600 F.2d 844, 845 (D.C. Cir. 1979).

<sup>42</sup> 606 F.2d 1068 (D.C. Cir. 1979); 13 E.R.C. (BNA) 1993 (D.C. Cir. 1979).

the issues confronting the court.<sup>43</sup> The third decision, issued on December 14, 1979, incorporates and modifies the *per curiam* opinion and gives greater analysis to the issues involved.

In response to the *Alabama Power* decision, EPA, on September 5, 1979, published proposed revised PSD regulations.<sup>44</sup> On August 7, 1980, final rules were adopted.<sup>45</sup> In *Alabama Power* the Court of Appeals for the District of Columbia dealt with fifteen main aspects of the regulations.<sup>46</sup> Only those parts of the opinion which affect the revised regulations will be considered in this article.

As the regulations are considered, examination of what constitutes emissions for PSD purposes will be undertaken first. The definitions of "source"<sup>47</sup> and "potential to emit"<sup>48</sup> will be considered as well as evaluation of the provisions dealing with fugitive emissions.<sup>49</sup> Next the exemptions of certain emissions from PSD review will be considered. Included in this category are de minimis exemptions,<sup>50</sup> the fifty ton per year exemption,<sup>51</sup> de minimis exemptions for best available control technology,<sup>52</sup> and the bubble concept.<sup>53</sup>

Determination of the amount of pollution permitted in a PSD area will be considered by evaluating the regulations concerning baseline concentration,<sup>54</sup> increment consumption,<sup>55</sup> and monitoring of air quality.<sup>56</sup> Applicability of PSD to sources located in non-attainment areas<sup>57</sup> will be examined, followed by an evaluation of

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<sup>43</sup> The expedited judgment and the *per curiam* opinion, according to the court, served the following purposes: (1) it enabled EPA to begin promulgating new regulations; (2) it allowed the court to entertain narrowly focused petitions for reconsideration before the final opinion was issued; and (3) it was in harmony with the judicial review provisions of the Clean Air Act. 13 E.R.C. (BNA) 1993, 1996-97 (D.C. Cir. 1979).

<sup>44</sup> 44 Fed. Reg. 51,924 (1979).

<sup>45</sup> 45 Fed. Reg. 52,676 (1980).

<sup>46</sup> 13 E.R.C. (BNA) 1993, 1997 (D.C. Cir. 1979). For a review of the *Alabama Power* decision, see Landau, *Alabama Power v. Costle: An End to a Decade of Controversy Over the Prevention of Significant Deterioration of Air Quality?*, 10 ENV'T L. 685 (1980).

<sup>47</sup> See text at notes 60-81 *infra*.

<sup>48</sup> See text at notes 82-97 *infra*.

<sup>49</sup> See text at notes 98-118 *infra*.

<sup>50</sup> See text at notes 119-34 *infra*.

<sup>51</sup> See text at notes 142-51 *infra*.

<sup>52</sup> See text at notes 152-72 *infra*.

<sup>53</sup> See text at notes 173-203 *infra*.

<sup>54</sup> See text at notes 204-41 *infra*.

<sup>55</sup> See text at notes 242-75 *infra*.

<sup>56</sup> See text at notes 276-94 *infra*.

<sup>57</sup> See text at notes 295-304 *infra*.

the new concept of innovative technology.<sup>58</sup> Finally, suggestions for a process whereby sources must notify the proper authorities of their intent to be exempt from PSD review will be evaluated.<sup>59</sup>

## II. INCLUSIONS OF EMISSIONS FOR PSD PURPOSES

### A. Source Definition

#### 1. The Alabama Power Decision

Section 165 of the Clean Air Act<sup>60</sup> mandates that the PSD program apply to certain types of "stationary sources" that emit or could emit one hundred tons of pollutants per year and "any other source" that could emit two hundred and fifty tons per year.<sup>61</sup> Congress, however, failed to define "stationary source" or "any other source" in the PSD provisions of the Clean Air Act. Consequently, EPA promulgated the following definition for PSD purposes: "'Source' means any structure, building, facility, equipment, installation or operation (or combination thereof) which is located on one or more contiguous or adjacent properties and which is owned or operated by the same person (or by persons under common control)."<sup>62</sup> EPA also enacted the following regulation: "notwithstanding the source sizes specified in [the first sentence of Clean Air Act 169(1), 42 U.S.C. § 7479(a) (Supp. I 1977), "major stationary source" means] any source which emits, or has the potential to emit, 250 tons per year or more of any air pollutant regulated under the Act."<sup>63</sup>

Three challenges were made to the above regulations in *Alabama Power*: the inclusion of "equipment," "operation," and "combination thereof" within EPA's definition of "source";<sup>64</sup> the extension of EPA's definition of "source" to include industrial units joined by contiguity and common ownership;<sup>65</sup> and EPA's extension of PSD to all sources with potential emissions of two hundred and fifty tons or more per year.<sup>66</sup> Those three challenges will now be considered.

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<sup>58</sup> See text at notes 305-10 *infra*.

<sup>59</sup> See text at notes 311-23 *infra*.

<sup>60</sup> Clean Air Act, § 165, 42 U.S.C. § 7475 (Supp. I 1977).

<sup>61</sup> *Id.* § 169(1), 42 U.S.C. § 7479(1).

<sup>62</sup> 40 C.F.R. §§ 51.24(b)(4), 52.21(b)(4) (1979).

<sup>63</sup> *Id.* §§ 51.24(b)(1)(ii), 52.21(b)(1)(ii).

<sup>64</sup> 13 E.R.C. (BNA) 1993, 2038 (D.C. Cir. 1979).

<sup>65</sup> *Id.* at 2039.

<sup>66</sup> *Id.* at 2040.



a. Use of "equipment," "operation," and "combination thereof" in definition of "source"

The *Alabama Power* court, relying on non-PSD sections of the Clean Air Act,<sup>67</sup> stated that source had to be defined by the terms "structure," "building," "facility," and "installation" and could not be defined by the terms "equipment," "operation," or "combination thereof."<sup>68</sup> In another section of the opinion,<sup>69</sup> however, the court gave EPA considerable discretion in defining the four permissible terms. The end result was that EPA was given latitude to define the terms "structure," "building," "facility," and "installation" so that these terms might encompass the meaning of the terms "equipment," "operation," and "combination thereof." Consequently, although the challenge to the regulations was upheld, the substantive definition of source remains unchanged.

b. Use of the concepts of contiguity and common ownership in definition of "source"

While the court gave tacit approval to EPA's use of the concepts of contiguity and common ownership in defining "source," the court also pointed out that this must be accomplished by fitting those concepts into the definitions of the terms "structure," "building," "facility," and "installation." Because of the instructions to EPA to include the concepts of contiguity and common ownership in the definition of the four terms, the court refused to rule on the reasonableness of EPA's contiguity and common ownership standards. The conclusion was that ripeness was lacking.<sup>70</sup>

c. Extension of PSD to all sources with potential to emit two hundred and fifty tons or more per year

The effect to be given section 169(1) of the Clean Air Act<sup>71</sup> was

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<sup>67</sup> Clean Air Act, §§ 111(a)(2), (3), 42 U.S.C. §§ 7411(a)(2), (3) (Supp. I 1977).

<sup>68</sup> 13 E.R.C. (BNA) 1993, 2039 (D.C. Cir. 1979).

<sup>69</sup> *Id.* at 2040.

<sup>70</sup> While the court in *Alabama Power* said that EPA must define the term "source" in the same way in the new source performance standards (NSPS) and PSD sections of the Clean Air Act (see note 67 *supra* and accompanying text), the court gives EPA latitude to define the four components of the term "source" differently in the NSPS and PSD sections. The reason given by the court for this interpretation is "due to differences in the purpose and structure of the two programs." 13 E.R.C. (BNA) 1993, 2040 (D.C. Cir. 1979).

<sup>71</sup> Clean Air Act, § 169(1), 42 U.S.C. § 7479(1) (Supp. I 1977) provides in full:

The term "major emitting facility" means any of the following stationary sources of air pollutants which emit, or have the potential to emit, one hundred tons per year or more

in dispute. In the first sentence of section 169(1), "major emitting facility" is defined to include twenty-eight specific types of industrial facilities which have the potential to emit one hundred tons or more of any air pollutant. The second sentence states that "any other source with the potential to emit two hundred fifty tons per year or more of any air pollutant" is also a major emitting facility. Four of the types of facilities in sentence one, however, are subject to PSD only if they meet additional size or operating capacity requirements. EPA interpreted the two sentences to mean that the four special entities in sentence one were considered a major emitting facility if they emitted two hundred and fifty tons of pollutants per year even if they did not meet the additional size or operating capacity requirements of sentence one. Industry took the view that the four entities were considered major stationary sources only if they met the additional size or operating capacity requirements regardless of whether they emitted more than two hundred and fifty tons of pollutants per year.<sup>72</sup>

After conceding that both positions were reasonable interpretations of section 169(1), the court ruled in favor of EPA, relying largely on legislative history.<sup>73</sup>

## 2. The New Regulations

There was little, if any, surprise over EPA's revised definition of "stationary source." The definition comports with the definition ordered by the Court of Appeals for the District of Columbia; thus it essentially mirrors the definition of stationary source found in section 111(a)(2) of the Act.<sup>74</sup> The new definition in the revised regulations reads: "'stationary source' means any building, structure, facility, or installation which emits or may emit any air pollutant subject to regulation under the Act."<sup>75</sup> This differs from the section 111(a)(2) definition only in that the final six words of the

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of any air pollutant from [the 28 types of stationary sources listed in footnote 84]. Such term also includes any other source with the potential to emit two hundred fifty tons per year or more of any air pollutant. This term shall not include new or modified facilities which are non-profit health or education institutions which have been exempted by the state.

<sup>72</sup> 13 E.R.C. (BNA) 1993, 2041 (D.C. Cir. 1979).

<sup>73</sup> *Id.* at 2041.

<sup>74</sup> Clean Air Act, § 111(a)(2), 42 U.S.C. § 7411(a)(2) (Supp. I 1977) defines stationary source for purposes of setting performance standards for new stationary sources.

<sup>75</sup> 45 Fed. Reg. 52,731, 52,736 (1980) (to be codified in 40 C.F.R. §§ 51.24(b)(5), 52.21(b)(5)).

new regulation do not appear in section 111(a)(2).

"Building, structure, facility, or installation" is defined to mean "all the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control)."<sup>76</sup> To determine if "pollutant-emitting activities belong to the same industrial grouping," the regulations refer to the *Standard Industrial Classification Manual*<sup>77</sup> and its two-digit code which groups industries by functional interrelationship.<sup>78</sup>

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<sup>76</sup> *Id.* at 52,731, 52,736 (1980) (to be codified in 40 C.F.R. §§ 51.24(b)(6), 52.21(b)(6)).

<sup>77</sup> UNITED STATES TECHNICAL COMMITTEE ON INDUSTRIAL CLASSIFICATION, STANDARD INDUSTRIAL CLASSIFICATION MANUAL (1972 & 1977 Supp.).

<sup>78</sup> EPA interpreted *Alabama Power* to mean that "source" must be defined so that the purposes of PSD are reasonably carried out, so that the definition of source comports with a common sense notion of "plant," and so that pollutant-emitting activities, which as a group would not fit into the ordinary meaning of "building," "structure," "facility," or "installation," are not aggregated. 45 Fed. Reg. 52,694-95 (1980). Assuming EPA's interpretation of *Alabama Power* is correct, as it appears to be, it is still questionable whether the new definitions fulfill all three criteria.

The first two criteria seem to have been met. In framing the first requirement—"source" must be defined to carry out the purposes of PSD—the *Alabama Power* court actually required very little. Since the purpose of PSD is to keep clean air clean but yet allow economic growth, giving directions to EPA to define source in a manner so that these purposes are carried out only instructs EPA not to include too much, nor too little, in the definition of source. Consequently, EPA cannot be criticized for failing to meet this directive.

The second requirement, comporting with a common sense notion of "plant," also appears to have been met by EPA. The requirements of contiguity or adjacent properties and common control along with functional groupings of industry seems to be congruent with an abstract notion of "plant." Whether the third requirement, as interpreted by EPA, is fulfilled can be questioned. EPA was not to aggregate pollutant-emitting activities that do not fit into the ordinary meaning of building, structure, facility, or installation. To fulfill that requirement, EPA relied on the *Standard Industrial Classification Manual* and its two-digit classification system. The *Manual* also has a three- and four-digit classification system but these were rejected by EPA because it was felt that the two-digit categories are narrow enough to separate activities into common sense groupings, yet broad enough not to divide artificially a set of activities that does constitute a "plant." 45 Fed. Reg. 52,695 (1980). Likewise, EPA was concerned that, with the three- or four-digit classification system, disputes would arise over whether a set of activities falls into one category or another. *Id.*

It is interesting to note, however, how broad the two-digit classification system is in the *Standard Industrial Classification Manual*. One example of a two-digit classification number is the category of Mining and Quarrying of Nonmetallic Minerals, Except Fuels. UNITED STATES TECHNICAL COMMITTEE ON INDUSTRIAL CLASSIFICATION, STANDARD INDUSTRIAL CLASSIFICATION MANUAL 39 (1972). Thus, the quarrying of building stone and chemical and fertilizer mineral mining (chemical and fertilizer mineral mining includes barite, fluorspar, potash, soda, borate minerals, phosphate rock, rock salt, sulfur, and various other minerals and elements, *id.* at 41-42.) have the same classification number and could conceivably be lumped together under the definition of source. Likewise, manufacturing of jewelry and silverware is classified in the same category as the manufacturing of burial caskets. *Id.* at

The court in *Alabama Power* also directed EPA to provide explicit notice as to whether vessels unloading at marine terminals and whether "long-line" operations such as pipelines, railroads, and transmission lines would fall under the definition of source.<sup>79</sup> EPA gives somewhat less than explicit notice on its future treatment of long-line operations. EPA states "activities that would be many miles apart along a long-line operation"<sup>80</sup> would not be treated as a source. As an example, EPA states that not all pumping stations along a multi-state pipeline would be treated as one source. It is quickly added, however, that EPA cannot say how far apart activities must be in order to be treated separately. It is stated that twenty miles is too far apart but the question of whether two major pumping stations located ten miles apart on a multi-state pipeline would be treated as a source is left unanswered.<sup>81</sup>

EPA's intent with respect to treatment of ships unloading at marine terminals is conveyed in a more explicit manner. EPA flatly states that emissions from ships will not be included in determining whether the terminal is a major source and thus subject to review under the PSD provisions.

### B. Potential to Emit

One of the PSD provisions struck down in *Alabama Power* concerned the definition of "potential to emit."<sup>82</sup> Section 169(1) of the Clean Air Act defines the term "major emitting facility" by stating that any of twenty-eight types<sup>83</sup> of stationary sources "which emit,

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211, 216. It would seem that aggregating these pollutant emitting activities would not fit within the ordinary meaning of "building," "structure," "facility," or "installation."

While a reason for rejecting a three- or four-digit classification system was the likelihood of disputes over which classification a set of activities falls into, EPA recognizes that using a two-digit classification system is also a problem and gives detailed instructions as to classification. With that acknowledgement, EPA does much to undercut its reason for rejecting a three- or four-digit classification system. For those reasons, EPA's choice of the two-digit classification system found in the *Manual* is questionable.

<sup>79</sup> 13 E.R.C. (BNA) 1993, 2040 (D.C. Cir. 1979).

<sup>80</sup> 45 Fed. Reg. 52,695 (1980).

<sup>81</sup> *Id.*

<sup>82</sup> 40 C.F.R. §§ 51.24(b)(3), 52.21(b)(3) (1979).

<sup>83</sup> The twenty-eight types of stationary sources are fossil-fuel fired steam electric plants of more than two hundred and fifty million British Thermal Units per hour heat input, coal cleaning plants (thermal dryers), Kraft pulp mills, Portland Cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of discharging more than two hundred and fifty tons per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants,

or have the *potential to emit*, one hundred tons or more per year of any air pollutant” is a major emitting facility.<sup>84</sup> Also included in that definition is any source with the potential to emit two hundred and fifty tons per year or more of any air pollutant.<sup>85</sup>

Section 169(1) is important because it determines which facilities come within the PSD permit requirements of section 165.<sup>86</sup> EPA defined the “potential to emit” language of section 169(1) as the maximum potential to emit a particular pollutant in the absence of any air pollution control equipment.<sup>87</sup> Under EPA’s definition, therefore, if, in the absence of any air pollution control equipment, a particular plant had the potential to emit one hundred<sup>88</sup> tons of pollutants per year, a permit was required under section 165. The Court of Appeals for the District of Columbia invalidated EPA’s definition and said that an emitting facility is major within the meaning of section 169(1) only if it either actually emits the established amount of an air pollutant (one hundred or two hundred and fifty tons) or it has the potential, when operating at design capacity, to emit the established amount.<sup>89</sup>

“Potential to emit” has now been redefined by EPA as “the maximum capacity of a stationary source to emit a pollutant under

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phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production facilities, chemical process plants, fossil-fuel boilers of more than two hundred and fifty million British Thermal Units per hour heat input, petroleum storage and transfer facilities with a capacity exceeding three hundred thousand barrels, taconite ore processing facilities, glass fiber processing plants, and charcoal production facilities. *Id.*

<sup>84</sup> 42 U.S.C. § 7479(1) (Supp. I 1977).

<sup>85</sup> Exempted from the definition, however, are new or modified facilities which are non-profit health or education institutions which have been exempted by the state. *Id.*

<sup>86</sup> *Id.* § 165(a), 42 U.S.C. § 7475(a) reads as follows: “No major emitting facility [as defined in § 169(1)] on which construction is commenced after August 7, 1977, may be constructed in any area to which this part applies unless. . . .”

<sup>87</sup> 40 C.F.R. §§ 51.24, 52.21 (1979) state in their entirety:

“Potential to emit” means the capability at maximum capacity to emit a pollutant in the absence of air pollution control equipment. “Air pollution control equipment” includes control equipment which is not, aside from air pollution control laws and regulations, vital to production of the normal product of the source or to its normal operation. Annual potential shall be based on the maximum annual rated capacity of the source, unless the source is subject to enforceable permit conditions which limit the annual hours of operation. Enforceable permit conditions on the type or amount of materials combusted or processed may be used in determining the potential emission rate of a source.

<sup>88</sup> Or 250 tons. See text at note 85 *supra*.

<sup>89</sup> 13 E.R.C. (BNA) 1993, 2005 (D.C. Cir. 1979).

its physical and operational design.”<sup>90</sup> The definition then states that any federally enforceable limitation on emissions would be excluded in determining the potential to emit. Air pollution control equipment and restrictions on hours of operations of a facility are defined as federally enforceable limitations on emissions and can thus be treated as limitations on the potential to emit.<sup>91</sup>

The revised regulations also exclude secondary emissions in determining potential to emit.<sup>92</sup> Secondary emissions are defined as emissions resulting from the construction or operation of a major stationary source or major modification that do not originate with the source or modification itself.<sup>93</sup> Examples given of secondary emissions are emissions from ships or trains coming to or from the source or modification and emissions from offsite support facilities that would not otherwise be in operation except for the fact that the stationary source or major modification exists.

In the new definition of “potential to emit,” EPA has excluded many sources that were previously included in the PSD permitting process. While this was partially mandated by *Alabama Power*,<sup>94</sup> EPA, in excluding from the definition of potential to emit any limitation on air pollution which is federally enforceable, appears to have gone further than required by that decision. *Alabama Power* stated that potential to emit should measure only those pollutants that were actually discharged or those pollutants that could be discharged when operating at full design capacity.<sup>95</sup> Included in any federally enforceable restriction on emissions, which must be excluded from the definition of potential to emit, are limitations on the hours of plant operation. For example, a plant may have a design capacity to be in operation twenty-three hours per day but is actually in operation only fourteen hours per day. According to the revised regulations, when determining potential to emit, only the discharges from the fourteen-hour period can be used to accumulate the one hundred or two hundred and fifty ton<sup>96</sup> total because limitations on hourly operations of a plant have been deemed to be

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<sup>90</sup> 45 Fed. Reg. 52,730, 52,736 (1980) (to be codified in 40 C.F.R. §§ 51.24(b)(4), 52.21(b)(4)).

<sup>91</sup> *Id.* at 52,732, 52,737 (to be codified in 40 C.F.R. §§ 51.24(b)(17), 52.21(b)(17)).

<sup>92</sup> *Id.* at 52,730, 52,736 (to be codified in 40 C.F.R. §§ 51.24(b)(4), 52.21(b)(4)).

<sup>93</sup> *Id.* at 52,732, 52,738 (to be codified in 40 C.F.R. §§ 51.24(b)(18), 52.21(b)(18)).

<sup>94</sup> 13 E.R.C. (BNA) 1993, 2002-05 (D.C. Cir. 1979).

<sup>95</sup> *Id.* at 2003.

<sup>96</sup> See text at notes 84-85 *supra*.

"federally enforceable."<sup>97</sup> Thus, EPA has not adopted the policy of measuring the level of pollutants which could be discharged when operating at full design capacity as *Alabama Power* permitted but, rather, EPA has defined potential to emit in terms of actual emissions.

### C. Fugitive Emissions

Fugitive emissions are best defined as any emission from a nonpoint source.<sup>98</sup> A point source emission is a concentrated emission, emanating from sources such as smokestacks or chimneys that disperse pollution from specific, identifiable locations. Fugitive emissions, on the other hand, are less concentrated pollutants from a less identifiable location. Dust that enters the air from a large pile of coal is an example of a fugitive emission. Section 302(j) of the Act<sup>99</sup> includes fugitive emissions in totaling pollutants for purposes of determining whether a source is a major stationary source or a major emitting facility.

Section 165 of the Act<sup>100</sup> applies equally to point source and fugitive emissions. Through regulation,<sup>101</sup> EPA made the determination that both fugitive and point source emissions were to be taken into account when determining whether a facility was a major emitting facility within section 169(1)<sup>102</sup> and thus whether the PSD requirements of section 165<sup>103</sup> apply. EPA realized, however, that including fugitive emissions in the pollutants defined in section 169(1) worked a significant hardship on the mining and forestry industries. As a result, EPA promulgated a partial exemption for sources of fugitive dust.<sup>104</sup> In *Alabama Power*, industry argued that

<sup>97</sup> See note 91 *supra*. The term "federally enforceable" is defined as follows:

"Federally enforceable" means all limitations and conditions which are enforceable by the Administrator, including those requirements developed pursuant to 40 CFR Parts 60 and 61, requirements within any applicable State Implementation Plan, and any permit requirements established pursuant to 40 CFR 52.21 or 40 CFR 51.24.

45 Fed. Reg. 52,732, 52,737 (1980) (to be codified in 40 C.F.R. §§ 51.24(b)(17), 52.21(b)(17)).

<sup>98</sup> 13 E.R.C. (BNA) 1993, 2016 (D.C. Cir. 1979).

<sup>99</sup> Clean Air Act, § 302(j), 42 U.S.C. § 7601(j) (Supp. I 1977).

<sup>100</sup> *Id.* § 165, 42 U.S.C. § 7475.

<sup>101</sup> 40 C.F.R. §§ 51.24(b)(1), 52.21(b)(1) (1979) read as follows:

"Major stationary source" means: Any of the following stationary sources of air pollutants which emit . . . 100 tons per year or more of any air pollutant regulated under the Clean Air Act . . ." (emphasis added).

<sup>102</sup> Clean Air Act, § 169(1), 42 U.S.C. § 7479(1) (Supp. I 1977).

<sup>103</sup> *Id.* § 165, 42 U.S.C. § 7475. See note 86 *supra*.

<sup>104</sup> 40 C.F.R. §§ 51.24(k)(5), 52.21(k)(5) (1979). The regulations required that the source

the partial exemption for sources of fugitive dust was not sufficient while environmental groups maintained the exemption was beyond EPA's authority.<sup>105</sup>

The court in *Alabama Power* invalidated the regulation which provided for the exemption because the exemption was based on the erroneous assumption that section 169 itself, without any regulations, subjects major sources of fugitive emissions to PSD preconstruction review and permit requirements.<sup>106</sup> In other words, the court held that because fugitive emissions need not be included for purposes of determining whether a source is a major emitting facility under section 169(1), those fugitive emissions are not brought under section 165 regulation and, thus, it is unnecessary that there be the exemption for fugitive emissions. EPA has, as a result of *Alabama Power*, promulgated new regulations<sup>107</sup> which exempt some fugitive emissions *only* in determining whether a facility is a major stationary source or major modification under section 169(1)<sup>108</sup> and consequently subject to the PSD permit requirements. If the source belongs to one of twenty-seven<sup>109</sup> enumerated categories, however, fugitive emissions will be included in determining the applicability of the PSD requirements. Such a regulation meets one of the requirements of *Alabama Power* as it is clear that the exemption is grounded on the definitional section 169 and

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must still apply best available control technology (BACT) as defined in Clean Air Act, § 169(3), 42 U.S.C. § 7479(3) (Supp. I 1977). See note 152 *infra*. Sources were exempt, however, from showing that fugitive emissions from the facility will not be in excess of the applicable national ambient air quality standards or the allowable increment.

<sup>105</sup> 13 E.R.C. (BNA) 1993, 2016-17 (D.C. Cir. 1979).

<sup>106</sup> See *Id.* at 2017 for the statutory construction used to arrive at this conclusion.

<sup>107</sup> 45 Fed. Reg. 52,733, 52,739 (1980) (to be codified in 40 C.F.R. §§ 51.24(i)(4)(ii), 52.21(i)(4)(vii)).

<sup>108</sup> Clean Air Act, § 169(1), 42 U.S.C. § 7479(1) (Supp. I 1977).

<sup>109</sup> The categories are as follows: coal cleaning plants (with thermal dryers); Kraft pulp mills; Portland Cement plants; primary zinc smelters; iron and steel mills; primary aluminum ore reduction plants; primary copper smelters; municipal incinerators capable of charging more than 250 tons of refuse per day; hydrofluoric, sulfuric, or nitric acid plants; petroleum refineries; lime plants; phosphate rock processing plants; coke oven batteries; sulfur recovery plants; carbon black plants (furnace process); primary lead smelters; fuel conversion plants; sintering plants; secondary metal production plants; chemical process plants; fossil-fuel boilers (or combination thereof) totaling 250 million British Thermal Units per hour heat input; petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels; taconite ore processing plants; glass fiber processing plants; charcoal production plants; fossil fuel-fired steam electric plants of more than 250 million British Thermal Units per hour heat input; and any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act. 45 Fed. Reg. 52,733 (1980) (to be codified in 40 C.F.R. §§ 51.24(i)(4)(ii)(a)-(aa)).



not on the operational section 165 upon which the prior regulations were based.

EPA's justification for its formulation of the revised regulations is that Congress, in section 302(j),<sup>110</sup> authorized EPA to determine the particular categories of sources that must include fugitive emissions in calculating the threshold one hundred (or two hundred and fifty) ton limit of section 169(1).<sup>111</sup> Interestingly enough, of the twenty-seven categories for which there is no exemption, twenty-six of those categories require the emission of one hundred tons of pollutants per year rather than the two hundred and fifty ton level<sup>112</sup> to be classified as a major emitting facility under section 169(a). The rationale for this distinction, according to EPA, is that Congress has already identified the industries that, due to their size, can bear the substantial financial cost imposed by the PSD regulations. Furthermore, EPA contends that it was the judgment of Congress that those industries were primarily responsible for the present condition of the nation's air.<sup>113</sup> Consequently, EPA felt justified in singling out these industrial categories to be prohibited from qualifying for the fugitive emissions exemption.

It is of interest to note that EPA could have promulgated, under the new regulations, exactly the same type of partial exemption system in existence under the discredited regulations.<sup>114</sup> That is, there could have been a partial exemption whereby the best available control technology (BACT)<sup>115</sup> would be required but it would not be necessary to show that fugitive emissions were not in excess of national ambient air quality standards (NAAQS)<sup>116</sup> or the allowable increment.<sup>117</sup> EPA did not choose that alternative. Instead, all sources are exempt from including fugitive emissions in the determination of whether a plant is a major emitting facility except for the twenty-seven industrial categories found in section 169(1). Consequently, all industrial categories which are exempt from including fugitive emissions in determining if the facility is a major

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<sup>110</sup> Clean Air Act, § 302(j), 42 U.S.C. § 7602(j) (Supp. I 1977).

<sup>111</sup> *Id.* § 169(1), 42 U.S.C. § 7479(1).

<sup>112</sup> See text at note 85 *supra*. There are actually 28 categories in section 169(1) but three categories were combined into one when the new regulations were written and thus there are now 26 categories in the regulations although all section 169(1) categories are included.

<sup>113</sup> 45 Fed. Reg. 52,691 (1980).

<sup>114</sup> See 13 E.R.C. (BNA) 1993, 2017 n.134 (D.C. Cir. 1979).

<sup>115</sup> See note 152 *infra*.

<sup>116</sup> See note 104 *supra*.

<sup>117</sup> See note 104 *supra* and accompanying text.

emitting facility are not subject to the section 165 PSD requirement of BACT. EPA did note, however, that a proposal similar to the discredited regulations is being studied and that such a regulation may be promulgated in the near future.<sup>118</sup>

### III. EXCLUSIONS OF EMISSIONS FOR PSD PURPOSES

#### A. *De Minimis Exemptions*

The new regulations state that any application for a permit must contain an analysis of ambient air quality for the area that the new source or modification would affect if there would be a "significant" emissions increase for a modification or if the potential to emit is "significant" for a new source.<sup>119</sup> Thus, only those sources that emit a significant amount of pollutants are subject to PSD review. "Significant" is defined to mean, for net emissions increases or the potential of the source to emit, a rate of emissions that would equal or exceed that rate listed for any one of fifteen pollutants.<sup>120</sup> For any pollutant not listed, "significant" is defined to mean any emissions whatsoever.<sup>121</sup> Notwithstanding the preceding definition of "significant," "significant" is also defined to mean any emissions rate or net emissions increase which constructs<sup>122</sup> within ten kilometers of a Class I area and has an impact on the

<sup>118</sup> 45 Fed. Reg. 52,693 (1980).

<sup>119</sup> *Id.* at 52,734, 52,740 (to be codified in 40 C.F.R. §§ 51.24(m)(i), 52.21(m)(i)).

<sup>120</sup> The pollutants and their corresponding emission rates are as follows:

carbon monoxide	100	tons per year (tpy)
nitrogen oxides	40	tpy
sulfur dioxide	40	tpy
particulate matter	25	tpy
ozone	40	tpy of volatile organic compounds
lead	0.6	tpy
asbestos	0.007	tpy
beryllium	0.0004	tpy
mercury	0.1	tpy
vinyl chloride	1	tpy
fluorides	3	tpy
sulfuric acid mist	7	tpy
hydrogen sulfide	10	tpy
total reduced sulfur	10	tpy
reduced sulfur compounds	10	tpy

*Id.* at 52,732, 52,737 (to be codified in 40 C.F.R. §§ 51.24(b)(23)(i), 52.21(b)(23)(i)).

<sup>121</sup> *Id.* at 52,732, 52,737 (to be codified in 40 C.F.R. §§ 51.24(b)(23)(ii), 52.21(b)(23)(ii)).

<sup>122</sup> "Construction means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in a change in actual emissions." *Id.* at 52,731, 52,736 (to be codified in 40 C.F.R. §§ 51.24(b)(8), 52.21(b)(8)).

Class I area which is equal to or greater than one microgram per cubic meter when averaged over twenty-four hours.<sup>123</sup>

In setting values for de minimis emission rates, EPA considered two factors most heavily.<sup>124</sup> The first factor was the cumulative effect on increment consumption<sup>125</sup> when numerous sources in an area each made a maximum de minimis emission increase, any one of which would not be reviewed under PSD requirements at the time of the change. The second factor was the projected resulting administrative burden associated with enforcing a given de minimis emission level.

To gather information on the first factor, EPA conducted an empirical study of the area surrounding Dayton, Ohio. EPA found that, even at the de minimis levels established which allow for a sixteen percent consumption of the increment<sup>126</sup> for sulfur dioxide in Class II areas and a twenty-eight percent consumption of the increment for particulate matter, there was no danger of consuming the increments because the specific concentration for a particular pollutant occurs only in a limited area at a limited time. EPA thus contends that de minimis changes made by numerous sources will seldom coincide with respect to the various pollutants and an increment for a particular pollutant will rarely be violated.<sup>127</sup>

EPA also cites what it considers to be other safeguards against increment consumption. EPA states that most, if not all, sources that fall under the de minimis PSD exemption will be reviewed under the New Source Review program which applies to nonattainment areas.<sup>128</sup> Moreover, the next PSD review of a major source will include review of the increment consumption and, if such review does not occur, it will be reviewed during the next periodic assessment of source growth.<sup>129</sup> Thus, EPA reasons, any violation of increment consumption will be detected eventually.

It appears that EPA's approach to protection of increment con-

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<sup>123</sup> *Id.* at 52,732, 52,737 (to be codified in 40 C.F.R. §§ 51.24(b)(23)(iii), 52.21(b)(3)(iii)).

<sup>124</sup> *Id.* at 52,707.

<sup>125</sup> Increment consumption is the act of raising pollution levels within the allowable limits established by the PSD statute and regulations in a clean air area. See text at notes 245-48 *infra*.

<sup>126</sup> "Consumption of the increment" and "increment consumption" are identical terms. *Id.*

<sup>127</sup> 45 Fed. Reg. 52,708 (1980).

<sup>128</sup> 40 C.F.R. § 51.18 (1979). This is true because most areas are designated both as clean air and nonattainment areas for different pollutants. See note 18 *supra*.

<sup>129</sup> 45 Fed. Reg. 52,708 (1980).

sumption does not assure absolute protection from violations of the allowable increases in pollution within a clean air area. One empirical study<sup>130</sup> in one particular location can hardly be relied upon to extrapolate to normal occurrences elsewhere. Also, even if the source is subject to New Source Review, nothing will be done to protect increment consumption. New Source Review is aimed at maintaining national ambient air quality standards<sup>131</sup> and, thus, is only remotely related to PSD goals. In addition, PSD review of a subsequent major source, or periodic assessment of source growth, will help protect increment consumption but at the expense of the wrong parties. If the de minimis exemptions have consumed the increments, it will be the new major source that will be denied a construction permit and all sources that fall within the de minimis exemptions can emit at will so long as they remain within the de minimis exemptions. Also, any violation of the allowable levels of increment consumption may not be detected until a long period after the violation occurs.

EPA tacitly admits that in some situations de minimis exemptions will consume increments at an accelerated rate.<sup>132</sup> EPA says that this situation can be controlled by the states through the establishment of smaller de minimis levels in their state implementation plans. Such an alternative is certainly available and states may find it in their best interest to lower de minimis levels.<sup>133</sup>

As to the second factor, the resulting administrative burden, EPA conducted a study and estimated that approximately seven hundred more sources will be subject to PSD review each year under the regulations.<sup>134</sup> Evidently, EPA felt that such a burden was not unbearable.

### *B. Exemptions Based on Air Quality Impact*

The new EPA regulations also contain optional exemptions from the monitoring requirements of the PSD program<sup>135</sup> which are to

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<sup>130</sup> See text at notes 126-27 *supra*.

<sup>131</sup> 40 C.F.R. § 51.18 (1979).

<sup>132</sup> 45 Fed. Reg. 52,708 (1980).

<sup>133</sup> If de minimis exemptions consume a great deal or all of an increment, a state may have problems attracting new industry because the new industry will be denied requisite construction permits. This assumes, however, that the state is interested in attracting new, polluting industry.

<sup>134</sup> 45 Fed. Reg. 52,709 (1980); ENVIRONMENTAL PROTECTION AGENCY, IMPACT OF PROPOSED AND ALTERNATIVE DE MINIMIS LEVELS FOR CRITERIA POLLUTANTS 58-64 (1980).

<sup>135</sup> The monitoring requirements are part of the preapplication procedure necessary for

be used at the discretion of the reviewing authority. This set of exemptions is based on the extent to which emissions will impact on the quality of the air rather than merely the rate of emissions of pollutants.<sup>136</sup> If a source does not fall within a de minimis emission exemption but has a relatively small impact on air quality, the source will still be subject to the permit requirements under section 165.<sup>137</sup> It will, however, be exempted from the permit preapplication monitoring requirements.<sup>138</sup> The reason for this is that EPA feels there is little to be gained from preconstruction monitoring in this situation.<sup>139</sup>

Implementation of this set of exemptions was made discretionary by the reviewing authority because EPA believes there will be situations where it is necessary to have monitoring even if a de minimis impact on air quality is predicted.<sup>140</sup> EPA lists two situations, by way of example, where the discretionary exemption should not apply. The first situation is where there is a threat to a PSD increment or a NAAQS. The other situation is where there is a possibility of an adverse impact on a Class I area.<sup>141</sup>

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obtaining a permit under section 165 of the Clean Air Act. For details of the monitoring requirement, see 45 Fed. Reg. 52,734, 52,740 (1980) (to be codified in 40 C.F.R. §§ 51.24(m)(ii)-(v), 52.21(m)(ii)-(vi)).

<sup>136</sup> The following are exempted if they impact air quality less than the stated amount:

carbon monoxide	575	g/m <sup>3</sup> , 8 hour average
nitrogen dioxide	14	g/m <sup>3</sup> , annual average
total suspended particulates	10	g/m <sup>3</sup> , 24 hour average
sulfur dioxide	13	g/m <sup>3</sup> , 24 hour average
ozone		(not available)
lead	0.1	g/m <sup>3</sup> , 24 hour average
mercury	0.25	g/m <sup>3</sup> , 24 hour average
beryllium	0.0005	g/m <sup>3</sup> , 24 hour average
fluorides	0.25	g/m <sup>3</sup> , 24 hour average
vinyl chloride	15	g/m <sup>3</sup> , 24 hour average
total reduced sulfur	10	g/m <sup>3</sup> , 24 hour average
hydrogen sulfide	0.04	g/m <sup>3</sup> , 1 hour average
reduced sulfur compounds	10	g/m <sup>3</sup> , 1 hour average

The exemptions can also apply if the concentrations of pollutants in the area that the source or modification would affect are less than the above listed concentrations. The exemption also applies to any pollutant not contained in the above list. 45 Fed. Reg. 52,733-34, 52,739 (1980) (to be codified in 40 C.F.R. §§ 51.24(i)(8), 52.21(i)(8)).

<sup>137</sup> Clean Air Act, § 165, 42 U.S.C. § 7475 (Supp. I 1977).

<sup>138</sup> Permit preapplication monitoring requirements involve the testing of air quality required before a source can apply for a PSD permit. See text at note 276 *infra*.

<sup>139</sup> 45 Fed. Reg. 52,710 (1980).

<sup>140</sup> *Id.*

<sup>141</sup> *Id.*

C. *Exemption for Stationary Sources Emitting Less Than Fifty Tons per Year of Any Air Pollutant*

Because EPA's prior interpretation of "potential to emit"<sup>142</sup> included so many facilities, EPA also instituted an exemption from the preconstruction review and permit requirements for any facility that actually emitted less than fifty tons of pollutants yearly, one thousand pounds per day, or one hundred pounds per hour, whichever was most restrictive.<sup>143</sup>

The *Alabama Power* decision struck down the fifty-ton exemption and held that EPA exceeded its authority in promulgating such a regulation.<sup>144</sup> The *Alabama Power* court realized that striking down those regulations was largely an academic exercise<sup>145</sup> in light of their ruling on EPA's definition of potential to emit. Nevertheless, the regulations were remanded to EPA for further consideration.<sup>146</sup>

EPA then promulgated new regulations to fill the gap left by the invalidated regulations.<sup>147</sup> The regulations closely paralleled section 165(b) of the Clean Air Act.<sup>148</sup> Under the new regulations, for a source to qualify for an exemption, the source must have been in existence on March 1, 1978, must be located in a Class II area,<sup>149</sup> and must emit less than fifty tons of each pollutant subject to regulation<sup>150</sup> after use of the best available control technology.<sup>151</sup>

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<sup>142</sup> See text at notes 87-88 *supra*.

<sup>143</sup> 45 C.F.R. §§ 51.24(j)(2), (k)(1)(ii); 52.21(j)(2), (k)(1)(ii) (1979).

<sup>144</sup> 13 E.R.C. (BNA) 1993, 2006 (D.C. Cir. 1979). EPA, in promulgating the exemption, relied on § 165(b) of the Clean Air Act, 42 U.S.C. § 7475(b) (Supp. I 1977), which provided for a fifty-ton exemption for modifications of existing sources which were in existence on August 7, 1977. EPA tried to extend this exemption to sources which came into existence after August 7, 1977.

<sup>145</sup> 13 E.R.C. (BNA) 1993, 2007 (D.C. Cir. 1979). Because EPA's definition of potential to emit had included so many minor sources of pollution, see text at notes 86-89 *supra*, EPA had excluded sources which actually emitted less than 50 tons per year. Since EPA was ordered to revise its definition of potential to emit, the reason for the 50 ton exemption no longer existed.

<sup>146</sup> 13 E.R.C. (BNA) 1993, 2007 (D.C. Cir. 1979).

<sup>147</sup> 45 Fed. Reg. 52,734, 52,739 (1980) (to be codified in 40 C.F.R. §§ 51.24(i)(7), 52.21(i)(7)).

<sup>148</sup> Clean Air Act, § 165(b), 42 U.S.C. § 7475(b) (Supp. I 1977). The only real difference between the new regulation and section 165(b) of the Act is the date the source had to be in existence in order to qualify for the exemption. For the reasons why EPA felt justified in changing the date, see 45 Fed. Reg. 52,690 (1980); 43 Fed. Reg. 26,380, 26,390 (1978); *Alabama Power v. Costle*, 13 E.R.C. (BNA) 1993, 2006 n.79 (D.C. Cir. 1979); *Citizens to Save Spencer County v. EPA*, 600 F.2d 844, 858 (D.C. Cir. 1979).

<sup>149</sup> See note 24 *supra* and accompanying text.

<sup>150</sup> Sulfur dioxide and particulate matter. See note 13 *supra*.

Those revisions now bring this part of the PSD regulations into conformance with section 165(b) of the Act.

#### *D. BACT and De Minimis Exemptions to BACT*

Section 165 of the Act provides that no new construction may be commenced unless the emissions from the construction or operation of the facility will not cause, or contribute to, air pollution in excess of (1) any maximum increase or concentration for any pollutant to which PSD applies more than once a year or (2) any other applicable emission standard under the Act. Also, no construction can be commenced unless the facility will employ the best available control technology (BACT)<sup>152</sup> for each pollutant regulated under the Act.<sup>153</sup> To accomplish the necessary preconstruction review, the ambient air quality at the proposed site for each pollutant regulated under the Act must be analyzed and the Administrator of EPA is directed to promulgate regulations to direct analysis.<sup>154</sup>

Regulations promulgated by EPA stated that PSD requirements, including BACT, applied to a proposed source or modification only with respect to those pollutants for which the proposed construction would be a major stationary source or major modification.<sup>155</sup> That means that a source must emit one hundred tons per year of a pollutant controlled under the Act if it is one of the twenty-eight types specified in the first sentence of section 169(1) or two hundred and fifty tons of a controlled pollutant if it is any other source.<sup>156</sup> Thus EPA adopted a de minimis criterion at the one hundred- and two hundred and fifty-ton levels for the application of BACT. That was done because EPA reasoned that the BACT de minimis levels should be consistent with the provisions for the application of PSD.<sup>157</sup>

The *Alabama Power* court struck down EPA's regulation for the same reasons it struck down the exemption for non-major modifi-

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<sup>151</sup> See note 152 *infra*.

<sup>152</sup> The term "best available control technology" means, "an emission limitation based on the maximum degree of reduction of each pollutant subject to regulation under this chapter emitted from or which results from any emitting facility. . . ." Clean Air Act, § 169(3), 42 U.S.C. § 7479(3) (Supp. I 1977).

<sup>153</sup> *Id.* §§ 165(a)(3), (4), 42 U.S.C. §§ 7475(a)(3), (4).

<sup>154</sup> *Id.* §§ 165(e)(1), (3), 42 U.S.C. §§ 7475(e)(1), (3).

<sup>155</sup> 40 C.F.R. §§ 51.24(i)(1), 52.21(i)(1) (1979). See text at notes 175-76 *infra*.

<sup>156</sup> See text at notes 83-85 *supra*.

<sup>157</sup> 43 Fed. Reg. 26,381-82 (1978).

cations.<sup>158</sup> The court stated that section 165<sup>159</sup> subjects all major emitting facilities to BACT and does not provide for any type of exemption for pollutants emitted at less than one hundred or two hundred and fifty tons per year.<sup>160</sup> The court recognized, however, that a de minimis exemption for BACT was a necessity in order to alleviate severe administrative burdens on EPA. The court emphasized that such an exemption must be formulated and the levels of the exemption must be established with respect to specific administrative concerns. Further, the court held that EPA cannot merely apply the one hundred or two hundred and fifty ton exemption to a situation where Congress had no intent to apply it.<sup>161</sup>

The court went on to state that in fashioning de minimis exemptions, the statutory context of what is de minimis for modification<sup>162</sup> and what is de minimis for BACT must be examined.<sup>163</sup> It was suggested that EPA could vary the levels of exemptions from BACT depending on the danger posed by increased emission of each pollutant.<sup>164</sup> The court also hinted that it may be relevant that Congress exempted new facilities emitting less than one hundred or two hundred and fifty tons per year from PSD review.<sup>165</sup>

EPA has promulgated new regulations concerning BACT.<sup>166</sup> BACT is essentially defined as a limitation on emissions based on the maximum degree of reduction for each pollutant regulated

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<sup>158</sup> See text at notes 177-78 *infra*.

<sup>159</sup> Clean Air Act, § 165(a)(4), 42 U.S.C. § 7475(a)(4) (Supp. I 1977).

<sup>160</sup> 13 E.R.C. (BNA) 1993, 2046 (D.C. Cir. 1979).

<sup>161</sup> *Id.*

<sup>162</sup> See text at notes 186-87 *infra*.

<sup>163</sup> 13 E.R.C. (BNA) 1993, 2046 (D.C. Cir. 1979).

<sup>164</sup> *Id.*

<sup>165</sup> *Id.* at 2046-47. In a related argument, industry groups in *Alabama Power* argued that regulations promulgated under section 165 of the Clean Air Act could only apply to sulfur dioxide and particulate matter and not to hydrocarbons, carbon monoxide, photochemical oxidants, and nitrogen oxides or any pollutant for which NAAQS standards are promulgated. The argument was based on section 166 of the Act which requires EPA to make studies and promulgate regulations to prevent significant deterioration of air quality resulting from those pollutants. Because EPA has not made the studies or promulgated regulations under section 166, industry claimed that PSD review of those pollutants was arbitrary and invalid.

The court rejected the argument, however, pointing out that section 165 applies to every pollutant subject to regulation under the Act and there is no exclusion for section 166 pollutants. It is also pointed out that the section 169 definition of BACT provides no exemption for the pollutants listed in section 166. Consequently, the court upheld the EPA regulations in this sense. *Id.* at 2047-48.

<sup>166</sup> 45 Fed. Reg. 52,731, 52,736-37 (1980) (to be codified in 40 C.F.R. §§ 51.24(b)(12), 52.21(b)(12)).



under the Act emitted from a proposed major source or proposed major modification. Thus, because BACT is defined so that it will apply only to major sources and major modifications, the BACT requirement applies only to modifications and new source construction which results in a significant net increase in the emissions of a regulated pollutant.<sup>167</sup> As a result of requiring the significant net increase, the same de minimis level of exemption applies to BACT as to PSD review.<sup>168</sup>

A determination of what constitutes BACT is to be conducted on a case-by-case basis while taking into account energy, environmental, and economic costs. To be taken into account as well are production processes and available methods, systems, and techniques. There are regulatory limits, however, to the application of BACT. BACT must be applied so that emissions will in no event exceed the applicable standards under parts 60 and 61 of volume 40 of the Code of Federal Regulations. If a reviewing authority determines that either technological or economic limitations would make the imposition of an emissions standard infeasible, another technique, such as design, equipment, work practice, operational standard, or a combination of these, may be substituted for the BACT requirement with the idea that such substitution will achieve substantially the same results as the application of BACT.

It should be emphasized that BACT applies to *any* pollutant regulated under the Act.<sup>169</sup> That means that BACT regulates not only the PSD pollutants but also all pollutants regulated under NSPS<sup>170</sup> and NESHAP<sup>171</sup> as well.

Thus, through its new regulations, EPA has adopted the same de minimis level of exemptions for both BACT and PSD review. In this respect, they are similar to the discredited regulations. Instead of identical de minimis levels for each pollutant, however, the new regulations contain different de minimis levels for each pollutant. The new regulations also vary from the old in that there is now a

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<sup>167</sup> This does not mean, however, that any pollutant from a source that was modified, regardless of whether the emission of that pollutant increased, is subject to BACT. Only those pollutants with more than a de minimis increase will be subject to BACT as a result of the major modification. *Id.* at 52,722-23.

<sup>168</sup> See notes 119-23 *supra* and accompanying text.

<sup>169</sup> Clean Air Act, § 165(4), 42 U.S.C. § 7475(4) (Supp. I 1977).

<sup>170</sup> New Source Performance Standards. Clean Air Act, § 111, 42 U.S.C. § 7411 (Supp. I 1977).

<sup>171</sup> National Emission Standards for Hazardous Air Pollutants. Clean Air Act, § 112, 42 U.S.C. § 7412 (Supp. I 1977).

secondary de minimis level of exemption from monitoring requirements for a particular pollutant when a source fails to meet the exemption level for exclusion from PSD review.

It is precisely here that the fifty-ton exemption becomes important. Take the example of a major stationary source which plans a modification which will increase sulfur dioxide emissions by forty-five tons per year and particulate matter emissions by thirty-five tons per year. Such a modification clearly does not fall within the de minimis exemptions<sup>173</sup> and thus may appear subject to PSD review. Since the output of each pollutant is less than fifty tons, however, the modification is exempt from PSD review. Thus a modification which does not fall within the de minimis exemption may be exempt from PSD review under the fifty-ton exemption. The determining factor is, of course, whether any one pollutant is emitted in excess of fifty tons per year.

#### *E. Modification and the Bubble Concept*

PSD review of facility construction also applies to the "modification" of any source or facility<sup>173</sup> as defined by section 111(a)(4) of the Act.<sup>174</sup> EPA, in the initial regulations, however, limited PSD review to those modifications it defined as "major."<sup>175</sup> The difference between EPA's definition and the definition found in the Act was that EPA's definition limited the PSD review to sources where emission rates were increased by two hundred and fifty tons per year or by at least one hundred tons per year, if the source was one of the twenty-eight listed in sentence one of section 169(1) of the Act.<sup>176</sup>

The *Alabama Power* court refused to accept EPA's definition saying that EPA lacked authority to depart from the definition found in the Act.<sup>177</sup> The court was aware that the decision might prove costly to industries affected but they could find no language in the statute that authorized the deviation enacted by EPA. Consequently, all modifications in clean air areas were to fall under PSD review<sup>178</sup> and EPA was ordered to amend its regulations.

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<sup>173</sup> See note 120 *supra*.

<sup>173</sup> Clean Air Act, § 169(2)(c), 42 U.S.C. § 7479(2)(c) (Supp. I 1977).

<sup>174</sup> *Id.* § 111(a)(4), 42 U.S.C. § 7411(a)(4).

<sup>175</sup> 40 C.F.R. §§ 51.24(b)(2), 52.21(b)(2) (1979).

<sup>176</sup> See text at notes 84-85 *supra*.

<sup>177</sup> 13 E.R.C. (BNA) 1993, 2042 (D.C. Cir. 1979).

<sup>178</sup> The court did allow for a de minimis exception, however. See text at notes 119-23

The court addressed the issue of EPA's use of a qualified form of the bubble concept. The bubble concept refers to whether there is a net increase in pollutants as a result of a modification. For example, if an old generator that emitted one hundred tons of sulfur dioxide per year is taken out of use and is replaced with a generator that emits one hundred tons of sulfur dioxide yearly, there is no increase in the amount of pollutants that are emitted into the "bubble" encompassing the facility. EPA exempted from BACT<sup>179</sup> and ambient air quality review<sup>180</sup> all modifications of a source that do not produce a net increase in any pollutants within the bubble.

The *Alabama Power* court upheld EPA's use of the bubble policy holding that such a policy was mandated by the Act. The court carefully distinguished it from the bubble concept which was struck down in *ASARCO, Inc. v. Environmental Protection Agency*.<sup>181</sup> The court instructed EPA to apply the bubble policy only when offsetting changes are substantially contemporaneous and the offsetting changes are within the same source.<sup>182</sup> EPA was also directed to define changes which are substantially contemporaneous.

In using the bubble concept in the initial regulations, EPA did not use it to exempt sources from procedural PSD review. Instead, it was used to exempt sources from substantive PSD review.<sup>183</sup> The most noteworthy procedural requirement of the PSD portions of the Act is the issuance of a permit under section 165.<sup>184</sup> The court held that the bubble concept must be applied to the procedural requirements of the Act as well as the substantive requirements.<sup>185</sup>

EPA has responded in the revised regulations with a new definition of "major modification."<sup>186</sup> It is now defined as "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase"<sup>187</sup> of regulated pollutants. EPA nowhere defines "physical

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*supra*.

<sup>179</sup> 40 C.F.R. §§ 51.24(j)(4), 52.21(j)(4) (1979).

<sup>180</sup> *Id.* §§ 51.24(k)(1)(iv), 52.21(k)(1)(iv).

<sup>181</sup> 578 F.2d 319 (D.C. Cir. 1978).

<sup>182</sup> 13 E.R.C. (BNA) 1993, 2044 (D.C. Cir. 1979).

<sup>183</sup> See text at notes 179-80 *supra*.

<sup>184</sup> Clean Air Act, § 165, 42 U.S.C. § 7475 (Supp. I 1977).

<sup>185</sup> 13 E.R.C. (BNA) 1993, 2045 (D.C. Cir. 1979).

<sup>186</sup> 45 Fed. Reg. 52,730, 52,735-736 (1980) (to be codified in 40 C.F.R. § 51.24(b)(2), 52.21(b)(2)).

<sup>187</sup> *Id.*

change" or "change in the method of operation" but instead lists seven specific events which are not included in those terms.<sup>188</sup> Presumably, all other physical changes or changes in methods of operation are covered by the definition. "Significant" is defined in terms of de minimis thresholds<sup>189</sup> for each pollutant subject to regulation under the Act.<sup>190</sup>

"Net emissions increase" is defined as the sum of the actual increase in emissions from a particular physical change or change in methods of operation and other increases and decreases in actual emissions which are contemporaneous with the change or are "otherwise creditable."<sup>191</sup> The criteria for determining which increases and decreases in actual emissions are mutually contemporaneous are included in the definition of "net emissions increase." Under the section 52 regulations,<sup>192</sup> a change in actual emissions is contemporaneous if the change occurs between the date five years before construction for the particular change begins and the date that the increase in emissions from the particular change occurs.<sup>193</sup> In determining the date the particular change occurs, EPA recognized that a period of adjustment may be necessary and allows for a 180-day grace period from the day that the equipment becomes

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<sup>188</sup> The seven events are: (1) routine maintenance, repair, and replacement; (2) use of an alternative fuel or raw material by reason of any order under sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act; (3) use of an alternative fuel by reason of an order or rule under section 125 of the Act; (4) use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste; (5) use of an alternative fuel or raw material by a stationary source which (a) the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 C.F.R. § 52.21 or under regulations approved pursuant to 40 C.F.R. § 51.18 or 40 C.F.R. § 51.24 or (b) the source is approved to use under any permit issued under 40 C.F.R. § 52.21 or under regulations approved pursuant to 40 C.F.R. § 51.24; (6) an increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 C.F.R. § 52.21 or under regulations approved pursuant to 40 C.F.R. § 51.24; and (7) any change in ownership at a stationary source. *Id.*

<sup>189</sup> See note 120 *supra* and accompanying text.

<sup>190</sup> 45 Fed. Reg. 52,732, 52,737-738 (1980) (to be codified in 40 C.F.R. §§ 51.24(b)(23), 52.21(b)(23)).

<sup>191</sup> *Id.* at 52,730, 52,736 (to be codified in 40 C.F.R. §§ 51.24(b)(3)(i), 52.21(b)(3)(i)). See text at note 197 *infra*.

<sup>192</sup> See note 35 *supra*.

<sup>193</sup> 45 Fed. Reg. 52,736 (1980) (to be codified in 40 C.F.R. § 52.21(b)(3)(ii)).

operational.<sup>194</sup> Under the section 51 regulations,<sup>195</sup> a state may define in its SIP what a contemporaneous change is so long as the period is not unreasonably long.<sup>196</sup>

The standards to determine whether net emissions increases are "otherwise creditable" are also included in the section defining net emissions increases. An increase or decrease in actual emissions is creditable only if it was not relied upon in issuing a PSD permit for the source and the permit is still in effect when the increase in actual emissions from the particular change occurs.<sup>197</sup> Reliance on an increase or decrease in actual emissions occurs when the reviewing authority, after taking the increase or decrease into account, determines that the proposal would not cause or contribute to a violation of an ambient standard or increment.<sup>198</sup>

Furthermore, an increase in actual emissions is creditable only in the amount that the new level of actual emissions is greater than the old.<sup>199</sup> Likewise, a decrease in actual emissions is creditable only to the extent that the lower of the old level of actual<sup>200</sup> or allowable<sup>201</sup> emissions exceeds the new level of actual emissions. Also, a decrease in actual emissions is creditable only if it is federally enforceable when and after the actual construction of the change commences and the decrease in emissions has about the same effect on public health and welfare as the corresponding increase from the proposed change.<sup>202</sup>

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<sup>194</sup> *Id.* at 52,736 (to be codified in 40 C.F.R. § 52.21(b)(3)(viii) [sic]).

<sup>195</sup> See note 35 *supra*.

<sup>196</sup> 45 Fed. Reg. 52,730 (1980) (to be codified in 40 C.F.R. § 51.24(b)(3)(ii)).

<sup>197</sup> *Id.* at 52,730, 52,736 (to be codified in 40 C.F.R. §§ 51.24(b)(3)(iii), 52.21(b)(3)(iii)).

<sup>198</sup> In addition, a contemporaneous increase or decrease in actual emissions of sulfur dioxide or particulate matter that occurs before the applicable baseline date is creditable only if, in addition, it is required to be considered in calculating how much of a particular increment remains available. *Id.* at 52,730, 52,736 (to be codified in 40 C.F.R. §§ 51.24(b)(3)(iv), 52.21(b)(3)(iv)).

<sup>199</sup> *Id.* 52,730, 52,736 (to be codified in 40 C.F.R. §§ 51.24(b)(3)(v), 52.21(b)(3)(v)).

<sup>200</sup> "Actual emissions" are generally defined to mean the rate a pollutant is actually emitted. The complete definition is found in *id.* at 52,732, 52,737 (to be codified in 40 C.F.R. §§ 51.24(b)(21), 52.21(b)(21)).

<sup>201</sup> "Allowable emissions" means the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following: (i) the applicable standards as set forth in 40 C.F.R. Parts 60 and 61; (ii) the applicable State Implementation Plan emissions limitation, including those with a future compliance date; or (iii) the emissions rate specified as a federally enforceable permit condition, including those with a future compliance date. 45 Fed. Reg. 52,731-32, 52,737 (1980) (to be codified in 40 C.F.R. §§ 51.24(b)(16), 52.21(b)(16)).

<sup>202</sup> *Id.* at 52,730, 52,736 (to be codified in 40 C.F.R. §§ 51.24(b)(3)(vi), 52.21(b)(3)(vi)).

In summary, determining whether there is a "net emissions increase" involves a three-step process. First, it must be determined whether the questioned physical or operational change would result in increased "actual emissions." Second, any other prior increases and decreases in "actual emissions" which are contemporaneous and creditable must be identified and measured. The final step is to total the increase from the particular change with the other contemporaneous increases and decreases. If the sum is a positive number, then a "net emissions increase" results from the change.<sup>303</sup> If, after application of the bubble concept, there is no net increase in emissions, the source is exempted from both procedural and substantive review.

EPA has thus made an attempt to implement the bubble policy mandated by the court in *Alabama Power*. The three aspects of the bubble concept required by *Alabama Power* are present: (1) the offsetting changes are substantially contemporaneous; (2) the offsetting changes are within the same source; and (3) "major modification" has been redefined so that the bubble policy applies to procedural, as well as substantive, provisions of the Clean Air Act. To accomplish that feat, however, a long chain of definitions has been promulgated. Piecing together the related definitions from the various parts of the new regulations is a difficult task.

#### IV. DETERMINATION OF AMOUNTS OF DETERIORATION IN CLEAN AIR AREAS

##### A. *Baseline*

A concept which is central to the implementation of the PSD statutory program is "increments." Increments represent the maximum allowable increases in concentrations of pollutants in a clean air area.<sup>304</sup> Associated with the concept of increments is baseline. The baseline reflects the amount of pollutants in the air and it is determinative of how much further pollution is permissible. Under the scheme of the Clean Air Act, all pollutants not measured and included in the baseline are treated as consuming the increments.<sup>305</sup> Therefore, there is great incentive on the part of industry in clean air areas to include as many pollutants as possible in the

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<sup>303</sup> Of course, any modification must be more than de minimis for PSD review to occur. See notes 119-23 *supra* and accompanying text.

<sup>304</sup> Clean Air Act, § 163, 42 U.S.C. § 7473 (Supp. I 1977).

<sup>305</sup> See text at notes 242-48 *infra*.

baseline concentration so that the fewest possible emissions will fall into the class of pollutants which consume increments.<sup>206</sup>

The first sentence of section 169(4) of the Act<sup>207</sup> specifically states the manner in which the baseline for a clean air area should be determined. The baseline concentration is required to be established at the time the first application for a permit in an area is received by EPA and must be based on EPA and state air pollution records as well as the monitoring data each applicant is required to submit.<sup>208</sup> Through regulation, however, EPA defined baseline concentration to mean the actual air quality of an area as of August 7, 1977. This regulation was challenged in *Alabama Power* and the court, in addition to admonishing EPA for its administrative arrogance, struck it down.<sup>209</sup>

In the revised regulations, EPA defines three terms applicable to the concept of baseline — baseline date,<sup>210</sup> baseline concentra-

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<sup>206</sup> The idea central to the concept of PSD is preventing further deterioration of air quality. Therefore, if a pollutant is already in existence, industry has every incentive to see that the baseline figures reflect that fact. If that does not occur, part of the limited increment consumption is expended.

<sup>207</sup> Clean Air Act, § 169(4), 42 U.S.C. § 7479(4) (Supp. I 1977).

<sup>208</sup> Section 169(4) states in full:

The term "baseline concentration" means, with respect to a pollutant, the ambient concentration levels which exist at the time of the first application for a permit in an area subject to this part, based on air quality data available in the Environmental Protection Agency or a State air pollution control agency and on such monitoring data as the permit applicant is required to submit. Such ambient concentration levels shall take into account all projected emissions in, or which may affect, such area from any major emitting facility on which construction commenced prior to January 6, 1975, but which has not begun operation by the date of the baseline air quality concentration determination. Emissions of sulfur oxides and particulate matter from any major emitting facility on which construction commenced after January 6, 1975, shall not be included in the baseline and shall be counted against the maximum allowable increases in pollutant concentrations established under this part.

*Id.*

<sup>209</sup> 13 E.R.C. (BNA) 1993, 2021-22 (D.C. Cir. 1979). In *Alabama Power* another challenge was made to EPA's interpretation of baseline date. It involved the grandfathering provision for facilities where construction had started before January 6, 1975. See note 208 *supra*. By regulation, 40 C.F.R. §§ 51.24(b)(11)(ii), 52.21(b)(11)(ii) (1979), EPA excluded from the definition of baseline concentration all sources where construction commenced prior to January 6, 1975, but were not in operation at the time the baseline concentration was determined. Also challenged was EPA's determination that voluntary fuel switches to fuels which were more plentiful was a consumption of the increment and not an addition to baseline concentration. The court upheld the regulations in both cases. 13 E.R.C. (BNA) 1993, 2023-27 (D.C.Cir. 1979).

<sup>210</sup> 45 Fed. Reg. 52,731, 52,737 (1980) (to be codified in 40 C.F.R. §§ 51.24(b)(14), 52.21(b)(14)).

tion,<sup>211</sup> and baseline area.<sup>212</sup>

### 1. Baseline Date

The concept of baseline date is important because it is from this date that the baseline concentrations are measured. Baseline date is defined in the revised regulations to mean the earliest date after August 7, 1977, that a major stationary source or a major modification submits a completed PSD application. Furthermore, separate baseline dates are to be established for each pollutant emitted from a source or modification. A baseline date is established for a pollutant when (1) the area in which the proposed construction will take place is a clean air area for that pollutant<sup>213</sup> and (2) there would be a significant net emissions increase of the pollutant or the pollutant would be emitted in significant amounts.<sup>214</sup> Presently, increments are established for only sulfur dioxide and particulate matter.<sup>215</sup> Consequently, baseline dates need to be established for only those two pollutants. Under section 166<sup>216</sup> of the Act, however, EPA is instructed to establish increments for several other pollutants. When that task is accomplished, separate baseline dates will be established for each pollutant for which there is an increment.<sup>217</sup>

With respect to determination of baseline dates, EPA clarifies two issues with explanatory comments. First, if a permit application was filed by sources that were major under the prior regulations, but are now classified as non-major,<sup>218</sup> the baseline date is not considered to have been triggered.<sup>219</sup> Second, if an applicant who establishes the baseline date is later denied a PSD permit or withdraws the application, the baseline date established by the applicant is maintained.<sup>220</sup>

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<sup>211</sup> *Id.* at 52,731, 52,737 (to be codified in 40 C.F.R. §§ 51.24(b)(13), 52.21(b)(13)).

<sup>212</sup> *Id.* at 52,731, 52,737 (to be codified in 40 C.F.R. §§ 51.24(b)(15), 52.21(b)(15)).

<sup>213</sup> See note 18 *supra* and accompanying text.

<sup>214</sup> See text at notes 119-23 *supra*.

<sup>215</sup> 40 C.F.R. § 51.24(c) (1979).

<sup>216</sup> Clean Air Act, § 166, 42 U.S.C. § 7476 (Supp. I 1977).

<sup>217</sup> At this time EPA is uncertain how these baseline dates will be computed. 45 Fed. Reg. 52,716 (1980).

<sup>218</sup> See text at notes 87-91 *supra*.

<sup>219</sup> 45 Fed. Reg. 52,717 (1980).

<sup>220</sup> *Id.* EPA also points out that as states begin to assume responsibility for implementing the PSD program, baseline dates may have been already established. States can minimize such an impact by restructuring the size of a baseline area which is impacted by a previous baseline date.



## 2. Baseline Concentration

Generally, baseline concentration is the actual level of pollutants in the air on the baseline date. Baseline concentration is defined in the revised regulations as the ambient concentration level existing in the baseline area<sup>221</sup> at the applicable baseline date.<sup>222</sup> To determine the baseline concentration, the following must be measured and totaled: (1) the actual emissions of sources in existence on the baseline date, with the exceptions listed in the following sentence; and (2) the emissions of stationary sources which commenced construction before January 5, 1975, but were not in operation by the applicable baseline date.<sup>223</sup> Not included in baseline concentration are actual emissions from any major stationary source where construction commenced after January 6, 1975, and actual emission increases or decreases at any stationary source which occurs after the baseline date.<sup>224</sup>

Although the present definition, compared with the prior definition, appears to be a relaxed definition of baseline concentration,<sup>225</sup> several announced policy shifts by EPA tend to make the new regulations more stringent than they first appear. One policy shift is that baseline concentration will no longer routinely include emission increases due to increased hours of operation or increased capacity utilization occurring after the baseline date from sources contributing to the baseline concentration.<sup>226</sup> A source must now prove that the increased pollution rate is more representative of normal operations than the prior pollution rate which made up the baseline concentration on the baseline date.<sup>227</sup> EPA feels that use of the actual emissions standard will reflect more accurately normal source operation in the baseline concentration.

Another policy shift announced is that EPA will no longer include the added emissions from a SIP relaxation<sup>228</sup> which is pend-

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<sup>221</sup> See text at notes 234-41 *infra*.

<sup>222</sup> 45 Fed. Reg. 52,731, 52,737 (to be codified in 40 C.F.R. §§ 51.24(b)(13), 52.21(b)(13)).

<sup>223</sup> *Id.*

<sup>224</sup> These two types of emissions are treated as increment consumptions. See text at notes 254-57 *infra*.

<sup>225</sup> It is more relaxed in that it permits facilities where construction began prior to January 6, 1975, and is not in operation on the baseline date to be included in the baseline concentration.

<sup>226</sup> 45 Fed. Reg. 52,714 (1980). That was previously included in the computation of baseline concentration.

<sup>227</sup> See note 200 *supra*.

<sup>228</sup> A SIP relaxation occurs when the SIP is revised and allows the emissions of more

ing on the baseline date in the baseline concentration.<sup>229</sup> Since the justification for the former policy of including pending SIP relaxations in baseline concentration is not now applicable,<sup>230</sup> EPA will no longer include pending SIP relaxations in the baseline concentration.

As a result of the new definition of baseline concentration, EPA is concerned that hardship may occur for states with a SIP relaxation pending at the time the first PSD application is filed in the area. In an area where there is no established baseline date, an application for a SIP relaxation is not required to provide an analysis of increment consumption.<sup>231</sup> If a PSD application is filed before final approval of the SIP relaxation, the application would establish a baseline date and the state would be forced to withdraw the SIP revision until the necessary increment consumption analysis has occurred. To avoid such a scenario, EPA exempts SIP relaxations from increment analysis if they are pending at the time a baseline date is established for the area.<sup>232</sup>

As a practical matter, it is the first permit applicant in a clean air area which is required to provide the data from which the base-

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pollutants.

<sup>229</sup> 45 Fed. Reg. 52,714 (1980).

<sup>230</sup> Under [the old] policy, emissions allowed under SIP relaxations pending on August 7, 1977 [were] included in the baseline concentration if the allowed source emissions were higher than actual source emissions. EPA adopted that policy in June 1978 in recognition of the fact that some states with SIP revisions pending on August 7, 1977 had allowed sources to increase emissions prior to final EPA approval of the relaxations, while other states with pending relaxations had required sources to comply with the lower emissions limitations in the existing SIP until final approval occurred. (citation omitted) To avoid penalizing sources in states that did not allow increases prior to approval, EPA provided that baseline concentrations include the allowable emissions under revised SIPs, if the relaxation was pending on August 7, 1977 and the allowed emissions exceeded the source's actual emissions. The effect was to allow sources to avoid increment consumption analyses for the emissions increase allowed in the revision. EPA considered the exemption justified because states and sources were unaware that EPA would establish a uniform baseline date of August 7, 1977, and those emissions increases after that date would consume increment.

EPA believes this exemption from increment consumption analyses is no longer necessary. States and sources have been on notice since June 1978 that emissions increases at existing sources due to SIP relaxations must be evaluated for possible increment consumption. No state or source has been uncertain as to the applicable baseline date, or been placed in an inequitable position as to other states or sources. Therefore, [the revised] regulations do not exempt from increment consumption analyses those SIP relaxations not finally approved by EPA prior to the baseline date in the affected area.

*Id.* at 52,714-15.

<sup>231</sup> See text at notes 245-48 *infra*.

<sup>232</sup> 45 Fed. Reg. 52,715 (1980).

line concentration is calculated. However unfair or burdensome that may seem, there is little doubt that such a scheme was intended and implemented by Congress.<sup>233</sup>

### 3. Baseline Area

Generally, the baseline area is the region that will be affected by a plant or facility which triggers the baseline date. In the revised regulations, baseline area is defined to mean any intrastate area, or part thereof, designated as a clean air area in which the major source or modification establishing the baseline date would have an air quality impact of at least one microgram per cubic meter (annual basis) of each pollutant for which the baseline date is established.<sup>234</sup> Area redesignations as clean air areas cannot intersect or be smaller than the area of impact of any major source or modification which establishes a baseline date.<sup>235</sup> Furthermore, a redesignated area cannot intersect or be smaller than the area of impact of any major source or modification located in the same state.<sup>236</sup> Thus EPA limits the size of a baseline area and restricts baseline areas on the basis of state boundaries.

It is interesting to note that under this definition of baseline area a source that is subject to PSD requirements triggers the baseline date in all intrastate clean air areas on which it impacts as well as the area in which it locates. EPA reasons that if a major source significantly affects any clean air area, the purposes of PSD are served if air quality deterioration is measured from the time pollutants impact on a clean air area.<sup>237</sup> The impact figure of one microgram per cubic meter was chosen to correspond with levels of significance used elsewhere in the PSD regulations.<sup>238</sup> The policy of triggering the baseline date if a clean air area is affected does not transcend state boundaries, however.<sup>239</sup>

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<sup>233</sup> Clean Air Act, § 165(e), 42 U.S.C. § 7475(e) (Supp. I 1977); *Alabama Power v. Costle*, 13 E.R.C. (BNA) 1993, 2022 (D.C. Cir. 1979); S. REP. NO. 127, 95th Cong., 1st Sess. 98 (1977).

<sup>234</sup> 45 Fed. Reg. 52,731, 52,737 (1980) (to be codified in 40 C.F.R. §§ 51.24(b)(15), 52.21(b)(15)).

<sup>235</sup> *Id.*

<sup>236</sup> *Id.* at 52,731, 52,736 (to be codified in 40 C.F.R. §§ 51.24(b)(15), 52.21(b)(15)).

<sup>237</sup> The purposes of PSD are served in that the PSD statutory and regulatory scheme are implemented at the first sign of air deterioration in a clean air area.

<sup>238</sup> See text at note 123 *supra*.

<sup>239</sup> 45 Fed. Reg. 52,733, 52,738 (1980) (to be codified in 40 C.F.R. §§ 51.24(i)(3), 52.21(i)(3)). See text at notes 286-91 *infra*.

The definition of baseline area also provides for redefining clean air areas by the states rather than by EPA.<sup>240</sup> Section 107(d) of the Act<sup>241</sup> allows states to submit redesignations to EPA. EPA will redefine the areas as requested if the available data support the change. Therefore, EPA will redefine the area if the available data show that a major source has not located in or impacted on a clean air area being considered for redesignation. Furthermore, the area can be classified as a new clean air area even if the new area was part of a clean air area for which the baseline date has been established.

The new definition places some restrictions on area redesignation. The boundaries of a redesignated area cannot intersect an area which is impacted by a major source or major modification that established a baseline date for the area nominated for redesignation.<sup>242</sup> Likewise, an area redesignation cannot intersect the area of impact of any major source or major modification that is otherwise required to obtain a PSD permit.<sup>243</sup> Also, area redesignations can be no smaller than the area of impact of such sources.<sup>244</sup>

### *B. Consumption of Increments*

The PSD part of the Clean Air Act is designed to prevent significant deterioration in those areas where air quality is superior to minimum standards.<sup>245</sup> To attain those ends, clean air areas<sup>246</sup> are divided into three classes<sup>247</sup> with each class having a maximum allowable increase in concentrations of pollutants.<sup>248</sup> Such maximum allowable increases are known as increments. Increments represent the maximum allowable increase in the level of air pollution in each area.

In *Alabama Power*, EPA's regulation dealing with what states

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<sup>240</sup> 40 C.F.R. § 51.24 (1979) previously dictated the definition of area as well as all other PSD provisions.

<sup>241</sup> Clean Air Act, § 107(d), 42 U.S.C. § 7407(d) (Supp. I 1977).

<sup>242</sup> 45 Fed. Reg. 52,731, 52,737 (1980) (to be codified in 40 C.F.R. §§ 51.24(b)(15), 52.21(b)(15)).

<sup>243</sup> *Id.*

<sup>244</sup> *Id.*

<sup>245</sup> See notes 14-15 *supra* and accompanying text.

<sup>246</sup> See text at note 18 *supra*.

<sup>247</sup> See note 24 *supra* and accompanying text.

<sup>248</sup> Clean Air Act, § 163, 42 U.S.C. § 7473 (Supp. I 1977). If violations of the allowable increases occur, the permit is suspended until the facility is brought into compliance.

must do if an applicable increment is violated was challenged.<sup>249</sup> The challenged regulation stated that if a state implementation plan is inadequate to prevent significant deterioration of air quality or if an increment is being violated, then the state must revise the SIP to correct the inadequacy or the violation.<sup>250</sup> The Court of Appeals for the District of Columbia ruled that EPA had authority under the statute to issue such a regulation<sup>251</sup> but that EPA was without power to dictate to the states how the increments could be consumed.<sup>252</sup> The court did state, however, that it was entirely appropriate for EPA to promulgate guidelines to assist states in managing the allocation of available increments.<sup>253</sup>

In the new regulations, increment consumption is inextricably linked with the concept of baseline concentration.<sup>254</sup> The definition of increment consumption includes all emissions which are not used to compute baseline concentration.<sup>255</sup> More specifically, there are two categories of emissions which are included. First, actual emissions from any major stationary source where construction began after January 6, 1975, are included.<sup>256</sup> Second, actual emissions increases and decreases at any stationary source which occur after the baseline date are included.<sup>257</sup>

The use of the term "actual emissions"<sup>258</sup> is not surprising. Op-

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<sup>249</sup> 13 E.R.C. (BNA) 1993, 2010 (D.C. Cir. 1979).

<sup>250</sup> 40 C.F.R. § 51.24(a)(3) (1979) states in full:

If the State or the Administrator determines that a plan is substantially inadequate to prevent significant deterioration or that an applicable increment is being violated, the plan shall be revised to correct the inadequacy or the violation. The plan shall be revised within 60 days of such a finding by a State or within 60 days following notification by the Administrator, or by such later date as prescribed by the Administrator after consultation with the State.

<sup>251</sup> Industrial groups had argued that, under section 165 of the Act, EPA only had authority to protect the consumption of the increments through the preconstruction review and permit process. The court ruled, however, that under sections 161 and 163(a) EPA had authority to issue the regulation in question. 13 E.R.C. (BNA) 1993, 2012 (D.C. Cir. 1979).

<sup>252</sup> Several environmental groups had urged in *Alabama Power* that EPA be required to promulgate regulations concerning the manner in which states could consume their increment. 13 E.R.C. (BNA) 1993, 2012 (D.C. Cir. 1979). Increment consumption merely refers to the increased levels of pollutants in a clean air area since the establishment of the baseline date.

<sup>253</sup> *Id.*

<sup>254</sup> See text at notes 221-24 *supra*.

<sup>255</sup> 45 Fed. Reg. 52,731, 52,737 (to be codified in 40 C.F.R. §§ 51.24(b)(13)(ii), 52.21(b)(13)(ii)).

<sup>256</sup> *Id.*

<sup>257</sup> *Id.*

<sup>258</sup> See notes 200 and 227 *supra* and accompanying text.

posed to the term actual emissions is the term "allowable emissions."<sup>259</sup> Allowable emissions are generally higher than actual emissions and EPA feels that if increment consumption would be based on allowable emissions, increment violations would be improperly anticipated and proposed source construction would be impeded.<sup>260</sup> Furthermore, since baseline concentration is defined in terms of actual emissions, it is necessary that increment consumption be defined in such terms also. Thus EPA's use of "actual emissions" reflects the desire to balance competing interests.

In delineating the maximum allowable increases for increment consumption purposes as "actual emissions from any major stationary source on which construction commenced after January 6, 1975,"<sup>261</sup> EPA's use of the word "construction" is extremely important. Construction is defined to mean "any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in a change in actual emissions."<sup>262</sup> The definition of construction clearly indicates through use of the words "demolition" and "modification" that emission reductions are included in the concept of construction. Thus, any reduction in emissions occurring after January 6, 1975, and before the baseline date can be used to increase the available increment.<sup>263</sup> If construction was defined to mean only expansion or creation of facilities, then only increases in emissions could be used to determine increment consumption and there could be no offset for decreases in increment consumption.

*Alabama Power* contained no directives for determining in what manner increment consumption should be calculated. EPA has promulgated no regulations with respect to computation of increment consumption but EPA has issued general guidelines.<sup>264</sup> The general guidelines state that increment consumption calculations will usually be grounded upon actual emissions over a two-year period.<sup>265</sup> Normally, the two-year period is the two years immediately

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<sup>259</sup> See note 201 *supra* and accompanying text.

<sup>260</sup> 45 Fed. Reg. 52,718 (1980).

<sup>261</sup> *Id.* at 52,731, 52,737 (to be codified in 40 C.F.R. §§ 51.24(b)(13)(ii)(a), 52.21(b)(13)(ii)(a)).

<sup>262</sup> *Id.* at 52,731, 52,736 (to be codified in 40 C.F.R. §§ 51.24(b)(8), 52.21(b)(8)).

<sup>263</sup> There is actually no increase in the available increment but the decrease in emissions offsets other increases under the bubble policy. See text at notes 181-82 *supra*.

<sup>264</sup> 45 Fed. Reg. 52,718 (1980).

<sup>265</sup> It is the responsibility of the proposed major source upon modification to collect the

preceding the increment consumption computation but the reviewing authority has discretion to use a different two-year period if that period is more reflective of normal source operation. Generally, actual emissions for this two-year period will be determined from source records.

In determining actual emissions, emissions allowed under federally enforceable requirements which pertain only to the specific sources are presumed to be the actual emission levels. Such specific source requirements include PSD permits, New Source Review permits,<sup>266</sup> and SIP emission limitations which are applicable to individual sources. EPA directs this presumption to be disregarded, however, if evidence of a reliable nature exists which shows that actual emissions differ from the established level of the permit or SIP.<sup>267</sup>

Despite the fact that the term "increment consumption" is never defined in the regulations and its implied meaning is hidden behind the definition of baseline concentration, there exists a section of the regulations entitled "exclusions from increment consumption."<sup>268</sup> In the event that a state has an EPA-approved PSD plan, section 163(c) of the Clean Air Act<sup>269</sup> provides for four exclusions from increment consumption. The regulations include those four exclusions<sup>270</sup> plus a fifth exclusion which excludes temporary in-

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data necessary to determine how much of the increment is still available to that proposed source. This is a part of the permit process. Clean Air Act, § 165(a)(3)(A), 42 U.S.C. § 7475(a)(3)(A) (Supp. I 1977).

<sup>266</sup> See 40 C.F.R. § 51.18(j) (1979).

<sup>267</sup> For the procedure used in the review of increment consumption due to SIP relaxations, see 45 Fed. Reg. 52,718 (1980).

<sup>268</sup> 45 Fed. Reg. 52,732, 52,738 (1980) (to be codified in 40 C.F.R. §§ 51.24(f), 52.21(f)).

<sup>269</sup> Clean Air Act, § 163(c), 42 U.S.C. § 7473(c) (Supp. I 1977).

<sup>270</sup> The plan may provide that the following concentrations shall be excluded in determining compliance with a maximum allowable increase:

- (i) Concentrations attributable to the increase in emissions from stationary sources which have converted from the use of petroleum products, natural gas, or both by reason of an order in effect under sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superceding legislation) over the emissions from such sources before the effective date of such an order;
- (ii) Concentrations attributable to the increase in emissions from sources which have been converted from using natural gas by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act over the emissions from such sources before the effective date of such plan;
- (iii) Concentrations of particulate matter attributable to the increase in emissions from construction or other temporary emission-related activities of new or modified sources;
- (iv) The increase in concentrations attributable to new sources outside the United States over the concentrations attributable to existing sources which are included in the baseline concentration.

creases in emissions of sulfur dioxide or particulate matter from stationary sources which are affected by plan revisions approved by EPA.<sup>271</sup>

In adopting the regulations dealing with exclusions from increment consumption, EPA seems to have gone beyond the authority granted to it in the Act. Section 163(c) of the Act<sup>272</sup> specifically limits the use of exclusions from increment consumption to a "State which has a plan approved by the Administrator for purposes of carrying out this part." Consequently, only a state which has an approved PSD plan can make use of the exclusions. In the regulations, however, EPA allows states without an approved PSD plan to make use of the exclusions for a nine-month period following the implementation of the revised PSD regulations.<sup>273</sup> The justification given by EPA for the nine-month period is that the new regulations will require states to submit revised PSD plans and that a nine-month grace period is necessary to accomplish that task. EPA also believes that the nine-month period will provide incentive for states to revise quickly their PSD plans.<sup>274</sup>

However good the intentions of EPA were in promulgating this nine-month grace period, the fact remains that it is against the express statutory provisions. Section 163(c) allows only states with an approved PSD plan to take advantage of the enumerated exemptions from increment consumption. EPA can feel relatively safe making such a provision, however, in that any challenge to this regulation would not likely be completed within the nine-month period and, thus, such a challenge would be, for all practical purposes, futile.<sup>275</sup>

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45 Fed. Reg. 52,732, 52,738 (1980) (to be codified in 40 C.F.R. §§ 51.24(f), 52.21(f)). If either of the first two exclusions are used, such exclusion will only be operative for five years after the implementation date. *Id.*

<sup>271</sup> EPA may approve a plan revision if (1) the temporary increase is less than two years, (2) the time period of five years for excluding the two contributions listed in note 270 *supra* is not renewable, (3) none of the emissions would impact a Class I area or an area where an applicable increment is being violated and there would be no violation of a national ambient air quality standard, and (4) no other increased limitation found in the exclusion from increment consumption section would be violated. *Id.*

<sup>272</sup> Clean Air Act, § 163(c), 42 U.S.C. § 7473(c) (Supp. I 1977).

<sup>273</sup> The date of implementation of these regulations is August 7, 1980. 45 Fed. Reg. 52,732, 52,738 (1980) (to be codified in 40 C.F.R. §§ 51.24(f)(3), 52.21(f)(3)).

<sup>274</sup> *Id.* at 52,719.

<sup>275</sup> EPA's PSD regulations became effective June 19, 1978, and were challenged within 60 days. The preliminary ruling was not handed down until June 19, 1979, with the final opinion issuing on December 14, 1979.



### C. Monitoring

Section 165(e)(1) requires that before preconstruction review occurs, an analysis must take place for each pollutant emitted and subject to regulation under the Act.<sup>276</sup> In the event that a baseline date has been triggered, the purpose of such monitoring is to establish baseline concentrations. If a baseline date has been previously established, the purpose of monitoring is to determine the amount of the increment remaining. EPA issued regulations which required analysis of all pollutants but monitoring only for pollutants for which a NAAQS existed.<sup>277</sup> In *Alabama Power*, environmental groups<sup>278</sup> attacked the regulations on the grounds that section 165(e)(1) required monitoring for all pollutants subject to regulation under the Act and not only for pollutants for which an NAAQS existed.<sup>279</sup>

In *Alabama Power*, the Court of Appeals for the District of Columbia held that section 165(e)(1) did not require monitoring but merely an analysis of each pollutant.<sup>280</sup> Furthermore, the court held that since section 165(e)(3)(D)<sup>281</sup> provides for modeling as a method of analysis, EPA had discretion to choose either monitoring or modeling as its choice of methodology.<sup>282</sup> Limiting that discretion, however, is section 165(e)(2)<sup>283</sup> which establishes the monitoring requirements.

Section 165(e)(2) requires "continuous air quality monitoring data gathered for purposes of determining whether emissions from such facility will exceed the maximum allowable increases or the maximum allowable concentration permitted under" the PSD provisions of the Act.<sup>284</sup> The court read this section to require monitoring to ensure that allowable increments and NAAQS are not violated. The court added, however, that since in many cases monitoring provides an inadequate analysis and, in some cases, is technologically infeasible as any type of reliable guide, EPA can require more than mere monitoring. In no event, however, may the

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<sup>276</sup> Clean Air Act, § 165(e)(1), 42 U.S.C. § 7475(e)(1) (Supp. I 1977).

<sup>277</sup> 40 C.F.R. §§ 51.24(n), 52.21(n) (1979).

<sup>278</sup> The Sierra Club and the Environmental Defense Fund.

<sup>279</sup> 13 E.R.C. (BNA) 1993, 2019 (D.C. Cir. 1979).

<sup>280</sup> *Id.*

<sup>281</sup> Clean Air Act, § 165(e)(3)(D), 42 U.S.C. § 7475(e)(3)(D) (Supp. I 1977).

<sup>282</sup> 13 E.R.C. (BNA) 1993, 2019 (D.C. Cir. 1979).

<sup>283</sup> Clean Air Act, § 165(e)(2), 42 U.S.C. § 7475(e)(2) (Supp. I 1977).

<sup>284</sup> *Id.*

monitoring requirement of section 165(e)(2) be waived.<sup>285</sup>

Section 165(e)(2) also provides, in accordance with regulations promulgated by EPA, that the one-year monitoring period prior to preconstruction review can be shortened. As EPA had not promulgated such regulations, the court in *Alabama Power* instructed EPA to provide those guidelines.<sup>286</sup> EPA's new regulations which deal with the concerns of the *Alabama Power* court are divided into two parts: preapplication analysis<sup>287</sup> and post-construction monitoring.<sup>288</sup>

### 1. Preapplication Analysis

The revised regulations require a preapplication analysis of ambient air quality for each air pollutant in an area that a major stationary source or major modification would affect<sup>289</sup> by more than a de minimis amount.<sup>290</sup> Furthermore, if no NAAQS exists for a pollutant, air quality monitoring is required to the extent that the reviewing authority determines<sup>291</sup> is necessary to assess ambient air quality. Consequently, if no NAAQS exists, air quality modeling<sup>292</sup> will usually be used to fulfill the air quality analysis required. If an NAAQS does exist, continuous air quality monitoring is required for the purposes of determining whether an allowable increment or an NAAQS is violated.<sup>293</sup> Such continuous monitoring must be conducted over a one-year period unless the reviewing authority decides that an adequate analysis can be conducted in a shorter period. In no event, however, can such a period be less than four

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<sup>285</sup> 13 E.R.C. (BNA) 1993, 2019 (D.C. Cir. 1979). This represents one example of the absurdities which occur under the Clean Air Act. After acknowledging that monitoring is often not reliable, the court nevertheless requires monitoring in all cases because section 165(e)(2) of the Act mandates it in all situations. See text at notes 336-41, *infra*.

<sup>286</sup> 13 E.R.C. (BNA) 1993, 2020 (D.C. Cir. 1979). Environmental groups in *Alabama Power* also argued for a post-construction monitoring requirement on the basis of sections 165(a)(7) and 165(e)(3)(D). The court held that while EPA had discretion to implement such monitoring, there was no requirement that EPA mandate such procedures. *Id*.

<sup>287</sup> 45 Fed. Reg. 52,734, 52,740 (1980) (to be codified in 40 C.F.R. §§ 51.24(m)(1), 52.21(m)(1)).

<sup>288</sup> *Id.* at 52,734, 52,740 (to be codified in 40 C.F.R. §§ 51.24(m)(2), 52.21(m)(2)).

<sup>289</sup> See text at notes 234-41 *supra*.

<sup>290</sup> See text at notes 119-23 *supra*.

<sup>291</sup> The reviewing authority may or may not be the state. See text at notes 26-29 *supra*.

<sup>292</sup> 40 C.F.R. §§ 51.24(l), 52.21(l) (1979). There are times, however, where monitoring will be used even when no NAAQS exists for the pollutant. For the particular instance when this exception will apply, see 45 Fed. Reg. 52,724 (1980).

<sup>293</sup> Non-methane hydrocarbons are exempted also even though a NAAQS exists for it. 45 Fed. Reg. 52,734, 52,740 (1980) (to be codified in 40 C.F.R. §§ 51.24(m)(iii), 52.21(m)(iii)).

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## 2. Post-Construction Analysis

The new post-construction regulations contain little which is surprising in light of *Alabama Power*.<sup>294</sup> The purpose of post-construction monitoring is to determine the effect that emissions from a source or modification have on air quality in any area. Such an analysis is purely discretionary with the reviewing authority. The decision whether or not to undertake such an analysis is based on the information necessary to determine the effect of emissions from major stationary sources and modifications on air quality in any area.

## V. OTHER PROVISIONS OF THE REVISED PSD REGULATIONS

### A. Sources Located in Nonattainment Areas

Section 165(a)<sup>295</sup> provides that a PSD permit is required before a major emitting facility "may be constructed in any area" to which the PSD provisions apply. By regulation,<sup>296</sup> EPA interpreted this language to mean that the permit requirements of section 165 applied to all sources which had an *impact* on any clean air area, whether they were located in a clean air or a nonattainment area. In *Alabama Power*, industry challenged that regulation on the ground that section 165 limited PSD review to sources constructed only in clean air areas.<sup>297</sup>

The court in *Alabama Power* sustained industry's position and struck down the regulation on the grounds that section 165 contains no requirement that all sources, wherever located, which impact on clean air areas are to be subject to PSD review.<sup>298</sup> The court did, however, point out how such a regulation could be promulgated by relying on four other sections of the Clean Air Act.<sup>299</sup>

The new regulations promulgated by EPA state that only major stationary sources or major modifications that are located in clean

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<sup>294</sup> See note 286 *supra*.

<sup>295</sup> Clean Air Act, § 165(a), 42 U.S.C. § 7475(a) (Supp. I 1977).

<sup>296</sup> 40 C.F.R. § 51.24(i)(2)(ii) (1979).

<sup>297</sup> 13 E.R.C. (BNA) 1993, 2012-13 (D.C. Cir. 1979).

<sup>298</sup> *Id.* at 2016.

<sup>299</sup> The court suggested that EPA had authority to promulgate such a regulation under sections 110, 114, 126, and 161 of the Clean Air Act, 42 U.S.C. §§ 7410, 7414, 7426, 7471 (Supp. I 1977). 13 E.R.C. (BNA) 1993, 2014-16 (D.C. Cir. 1979).

air areas are subject to PSD review.<sup>300</sup> For a major modification or a major stationary source to be subject to PSD review for a particular pollutant, several criteria must be met. First, the source must be located in what is a clean air area for any type of pollutant. Second, the area cannot be a nonattainment area for that particular pollutant. In other words, the area must be a clean air area for the pollutant. Finally, the source need not be major for that particular pollutant in order to be subject to PSD review. Consequently, if a source is major only for pollutants for which an area is designated nonattainment, PSD review will still apply to all pollutants for which the area is a clean air area even though none of those pollutants is emitted in major amounts. In the event, however, that the area is nonattainment for all pollutants which are emitted in greater than de minimis amounts, PSD review will not occur.<sup>301</sup>

EPA based its new regulations on section 165 and 169 of the Clean Air Act. It did not follow the court's suggestion and promulgate substantially the same regulations under different authority.<sup>302</sup> EPA indicates that it is still concerned with the problem that the earlier regulations attacked—interstate pollution<sup>303</sup>—but only makes the statement that regulations concerning the problem may be proposed sometime in the future.<sup>304</sup>

### B. Innovative Technology

The new regulations contain a concept which has not been implemented before by EPA in the context of PSD—innovative technology.<sup>305</sup> Innovative technology is defined as a system of air pollution control which has not been adequately demonstrated in practice but would have a substantial likelihood of reducing air pollution below levels attained by current means, would achieve the same level of pollution control at a reduced cost in terms of energy or economics, or would be accompanied by non-air, environmental benefits.<sup>306</sup> A reviewing authority can approve innovative

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<sup>300</sup> 45 Fed. Reg. 52,733, 52,738 (1980) (to be codified in 40 C.F.R. §§ 51.24(i)(3), 52.21(i)(3)).

<sup>301</sup> *Id.* at 52,711.

<sup>302</sup> See note 299 *supra*.

<sup>303</sup> More accurately, the former regulations attacked inter-area pollution. This, of course, did attack the problem of interstate pollution as no area can encompass more than one state.

<sup>304</sup> 45 Fed. Reg. 52,712 (1980).

<sup>305</sup> *Id.* at 52,735, 52,741 (to be codified in 40 C.F.R. §§ 51.24(s), 52.21(v)).

<sup>306</sup> *Id.* at 52,732, 52,737 (to be codified in 40 C.F.R. §§ 51.24(b)(19), 52.21(b)(19)).

technology if (1) there will be no resulting public health risk, (2) the facility agrees to achieve BACT within a specified amount of time,<sup>307</sup> (3) there will be no violation of an NAAQS, (4) there will be no impact on a Class I area where an increment is known to be violated, and (5) all other applicable permit requirements have been met.<sup>308</sup> Approval of innovative control technology will be revoked if the facility fails to achieve BACT levels by the specified date, or if the facility poses a threat to public health, or if the reviewing authority decides that the innovative system is unlikely to achieve the required level of control or protection of public health.<sup>309</sup> Furthermore, if approval of innovative technology is withdrawn, the source may be allowed up to three additional years to meet the BACT requirements.<sup>310</sup>

Clearly, the purpose of those new regulations is to encourage the development of alternative and improved pollution control technology. It is not, however, a provision that will allow experimentation at the cost of permanently defiled air. Safeguards built in to prevent that particular occurrence include not allowing any violation of an NAAQS or increment and not allowing any impact on Class I areas. Through the concept of innovative technology, EPA has taken a middle road with respect to the occasionally conflicting goals of improved technology through experimentation and avoidance of further deterioration of air quality.

### C. Notification

When the new EPA regulations were proposed,<sup>311</sup> provisions were included requiring certain construction projects, exempt from PSD review, to file a report ninety days in advance of the time that the exempted construction would begin.<sup>312</sup> The notice requirement would apply to source construction not subject to PSD review because either increased emissions were offset by a contemporaneous decrease so that there was no significant net increase in emissions of pollutants<sup>313</sup> or because the use of air pollution controls not re-

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<sup>307</sup> The date is specified by the reviewing authority but in no case can the date be more than four years from the time of startup or seven years from the time the permit is issued. *Id.* at 52,735, 52,741 (to be codified in 40 C.F.R. §§ 51.24(s)(2)(ii), 52.21(v)(2)(ii)).

<sup>308</sup> *Id.* at 52,735, 52,741 (to be codified in 40 C.F.R. §§ 51.24(s), 52.21(v)).

<sup>309</sup> *Id.*

<sup>310</sup> *Id.*

<sup>311</sup> September 5, 1979. 44 Fed. Reg. 51,924 (1979).

<sup>312</sup> *Id.* at 51,944, 51,951, 51,955-56.

<sup>313</sup> See text at notes 181-82 *supra*.

quired by a SIP would lower the "potential to emit" below de minimis levels.<sup>314</sup> The purpose of this proposed requirement was to compel the source to provide information to the reviewing authority<sup>315</sup> so that it could be determined whether the exemption was proper. EPA states that they had no intention of using the notice requirement to determine whether PSD review was applicable and that they also had no intention that this requirement cause delay in construction of any source affected by the regulations.<sup>316</sup> Rather, the purpose of the proposal, according to EPA, was to record unreviewed emission increases and reductions which occur over several years so that their impact on air quality can be measured.<sup>317</sup> Furthermore, EPA envisioned using the notice requirement to provide for advance registration for reduction credits under the bubble policy.<sup>318</sup>

In promulgating the final regulations, EPA deleted the proposed notification requirements. The reason for this is that each state presently has the means to learn of all proposed facilities and modifications prior to commencement of construction.<sup>319</sup> EPA is still concerned with information concerning documentation of previous offsetting emission decreases<sup>320</sup> but EPA now takes the position that the burdens imposed by the proposed regulation outweigh the beneficial aspects.<sup>321</sup>

While no regulations were promulgated, EPA did issue a notice of warning to owners and operators.<sup>322</sup> In the notice EPA stated the following: (1) sufficient records concerning contemporaneous emission increases and decreases or determination of potential to emit<sup>323</sup> should be kept in order to prove that no permit was required; (2) if it becomes apparent that a more comprehensive notification system is needed than the one currently in place, regulations similar to those proposed will be promulgated by EPA; and

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<sup>314</sup> See notes 119-23 *supra* and accompanying text.

<sup>315</sup> The reviewing authority need not be EPA. It can also be the state. See text at notes 26-29 *supra*.

<sup>316</sup> 45 Fed. Reg. 52,725 (1980).

<sup>317</sup> *Id.*

<sup>318</sup> *Id.*

<sup>319</sup> Most states learn of proposed construction through either their New Source Review procedures, 40 C.F.R. § 51.18 (1980), or notification letters filed by the source when requesting a formal applicability determination. 45 Fed. Reg. 52,725 (1980).

<sup>320</sup> See text at notes 181-82 *supra*.

<sup>321</sup> 45 Fed. Reg. 52,725 (1980).

<sup>322</sup> *Id.*

<sup>323</sup> See text at notes 90-91 *supra*.

(3) any source which improperly avoids review will be considered in violation of the applicable SIP and will be retroactively reviewed.

Thus EPA has deleted the proposed notification requirements. Since *Alabama Power* did not make any statement concerning notification, the deletion of the proposed regulations was entirely proper. It appears, however, that EPA favors some type of notification requirement and such regulations may very well appear in the future.

## VI. EFFECT AND SIGNIFICANCE OF THE PSD REGULATIONS

Perhaps the most surprising and most significant portion of the recently promulgated regulations is the revised definition of "potential to emit."<sup>324</sup> Not only does EPA, as ordered by the court in *Alabama Power*, take into account pollution control equipment in determining the potential to emit, but EPA also takes into account actual hours of operation in calculating the source's potential to emit. EPA was not required by the court in *Alabama Power* to make this provision. Instead, the change was made in response to industry complaints that no source operates twenty-four hours a day, 365 days a year.<sup>325</sup>

The significance of the revised definition of potential to emit lies in the fact that a source can be made completely exempt from the PSD review and permit process by simply limiting the hours of its operation. While most plants will not be planned solely around the requirements of the Clean Air Act, the following situation, where it would benefit a facility to make use of the new definition, could easily arise.

In a case where a new plant is being planned in a clean air area with no established baseline concentration and the expectation is that the plant will not reach full production for several years, the plant may wish to limit its hours of operation so that it may avoid the PSD review and permit process. Later, when the plant wishes to upgrade its level of operation so that it becomes a major source, it would at that time undergo the PSD review and permit process. The advantage to industry of this strategy is that the possibility exists that, between the time of construction and the time the facility becomes a major source subject to PSD, another plant will

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<sup>324</sup> *Id.*

<sup>325</sup> 45 Fed. Reg. 52,688 (1980).

have been designated a major source or modification. Thus the responsibility to conduct the analysis under section 165(e)<sup>326</sup> necessary to establish the baseline concentration in the clean air area is shifted to the second plant. By delaying designation of the first plant as a major source, the cost and trouble of establishing the baseline concentration for the area has been avoided by the first plant.<sup>327</sup>

Another provision of significance in the new regulations is the de minimis threshold at which major modifications become subject to PSD for a particular pollutant.<sup>328</sup> The proposed regulations<sup>329</sup> had set the de minimis level for sulfur dioxide and particulate matter at ten tons per year while the adopted regulations raised it to forty tons for sulfur dioxide and twenty-five tons for particulate matter. The de minimis levels for other pollutants were raised as well. As a result, facilities which make small modifications will not be subject to the PSD process so long as those facilities remain within the elevated de minimis level for each pollutant emitted.

Another significant change brought about by the new regulations is that, in a limited number of circumstances, states are given some degree of flexibility in developing and implementing their PSD program. Prior to this, states were bound to include requirements at least as stringent as those found in section 51.24 of volume 40 of the Code of Federal Regulations. The only discretion available to the states was that it was permissible to set standards more stringent than those found in section 51.24.

Evidently, EPA now believes that a degree of flexibility among the states is desirable in making substantive determinations. EPA certainly has not allowed itself to go overboard in providing flexibility in the regulations but discretion now exists on the part of the states in places where it was not found before. For example, states have been given authority to redefine baseline areas.<sup>330</sup> States can also now designate the types and amount of data needed for monitoring purposes.<sup>331</sup> In determining whether offsets

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<sup>326</sup> Clean Air Act, § 165(e), 42 U.S.C. § 7475(e) (Supp. I 1977).

<sup>327</sup> This scenario assumes, of course, that when the first facility increases its level of operation and becomes a major source, there will be a sufficient increment remaining so that the desired level of operation is permissible.

<sup>328</sup> See notes 119-23 *supra* and accompanying text.

<sup>329</sup> 44 Fed. Reg. 51,937-38 (1979).

<sup>330</sup> 45 Fed. Reg. 52,731, 52,736 (1980) (to be codified in 40 C.F.R. §§ 51.24(b)(15), 52.21(b)(15)).

<sup>331</sup> *Id.* at 52,734, 52,740 (to be codified in 40 C.F.R. §§ 51.24(m)(ii), 52.21(m)(ii)).



were contemporaneous, states may define contemporaneous to be longer or shorter than the regulatory five-year limit.<sup>332</sup> In determining the amount of source information and analysis required of the applicant, the state has discretion.<sup>333</sup> Allowing temporary exclusions from increment consumption is also optional with the state.<sup>334</sup>

For the most part, industry has been given concessions in the new PSD regulations. One such example is EPA's revocation of the proposed notification requirements.<sup>335</sup> The question still remains, however, as to whether industry, environmentalists, and EPA can live with the entire PSD program. The new regulations have not in any way simplified the complex determinations and procedures of the PSD programs. EPA must bear an extremely heavy administrative burden in implementing the program. It may be argued that the new regulations only add another level of confusion to the program.

The entire PSD program has come under attack by business,<sup>336</sup> the states,<sup>337</sup> and a former EPA deputy administrator.<sup>338</sup> Additionally, state officials and industry have gone on record as advocating abolition of the increment concept in future PSD regulations<sup>339</sup> and have advocated that such regulations should be based solely on technology requirements.<sup>340</sup> While it must be remembered which parties advocate that position, the fact remains that the PSD program presents significant difficulties. In fact, a former deputy administrator of EPA questions whether Congress had any vague notion of what PSD involved when it passed the 1977 Amendments to the Clean Air Act.<sup>341</sup>

The Administrator of the Environmental Protection Agency has stated that the Clean Air Act will be in jeopardy when it comes before Congress in 1981.<sup>342</sup> The National Commission on Air Quali-

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<sup>332</sup> *Id.* at 52,730 (to be codified in 40 C.F.R. § 51.24(b)(3)(ii)).

<sup>333</sup> *Id.* at 52,734, 52,740 (to be codified in 40 C.F.R. §§ 51.24(m)(1), 52.21(m)(1)).

<sup>334</sup> *Id.* at 52,732, 52,738 (to be codified in 40 C.F.R. §§ 51.24(f)(3), 52.21(f)(3)).

<sup>335</sup> See text at notes 308-23 *supra*.

<sup>336</sup> 11 ENVIR. REP. (BNA) (Curr. Dev.) 268 (June 20, 1980).

<sup>337</sup> *Id.* at 326 (July 4, 1980).

<sup>338</sup> [1979] ENVIR. REP. (BNA) (Monograph No. 28) 13-15.

<sup>339</sup> These future regulations are referred to as PSD set II regulations and will govern hydrocarbons, ozone, nitrogen oxides, carbon monoxide and lead. Clean Air Act, § 166, 42 U.S.C. § 7476 (Supp. I 1977).

<sup>340</sup> 11 ENVIR. REP. (BNA) (Curr. Dev.) 384-85 (July 11, 1980).

<sup>341</sup> [1979] ENVIR. REP. (BNA) (Monograph No. 28) 14.

<sup>342</sup> 11 ENVIR. REP. (BNA) (Curr. Dev.) 692 (Sept. 12, 1980).

ty has recommended several changes in the PSD program including replacement of Class II and Class III increments with a BACT requirement for all new sources, or replacing PSD entirely with a system of market incentives aimed at controlling air pollution.<sup>343</sup> An EPA assistant administrator<sup>344</sup> has also called for reform of the Clean Air Act but, instead of advocating a major overhaul of the Act, encourages a fine tuning of the current provisions.<sup>345</sup> The idea that technology-based standards alone will control air pollution is attacked by the assistant administrator on the grounds that technological innovation is not likely to occur.

## VII. CONCLUSION

It appears that there will be some kind of revision involving the PSD requirements of the Clean Air Act. Whether the revisions are substantial remains to be seen. The issue at stake is not whether there will be prevention of significant deterioration requirements but, rather, what kind of prevention of significant deterioration requirements will exist. In determining what type of requirement best meets both the needs of industry and the need for clean air, the cost to business and the cost to government must be assessed.

This article has examined and summarized the recently revised PSD program. The revised PSD plan can be broken into two large categories: (1) the determination of which emissions are subject to and exempt from the PSD program and (2) the determination of the amounts of air deterioration allowable in clean air areas. Although the concept of preventing significant deterioration of air quality is relatively simple, the mechanics of the plan are not. The technical definitions coupled with the occasionally well-disguised operative clauses make it difficult, if not impossible, to understand one aspect of the program without understanding the entire PSD program. Whether Congress can and will devise a simpler, but yet effective, PSD program remains to be seen.

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<sup>343</sup> *Id.*

<sup>344</sup> David G. Hawkins, Assistant Administrator for Air, Noise, and Radiation.

<sup>345</sup> 11 ENVIR. REP. (BNA) (Curr. Dev.) 705 (Sept. 19, 1980).